The Orchadian

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Official Journal of the Australasian Native Orchid Society

Vail: Walter T. Upton DFM OAM

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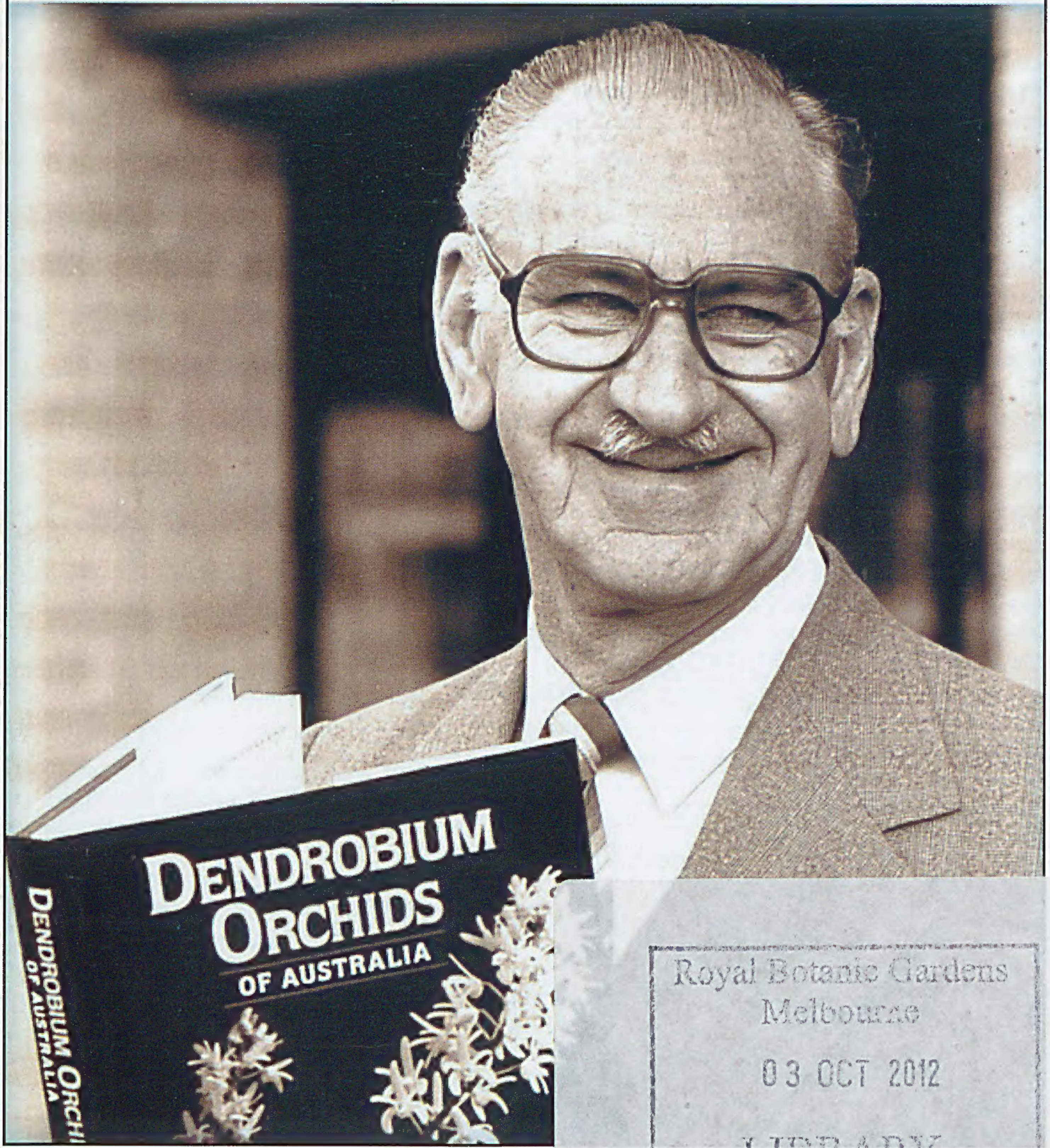
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The Orchadian

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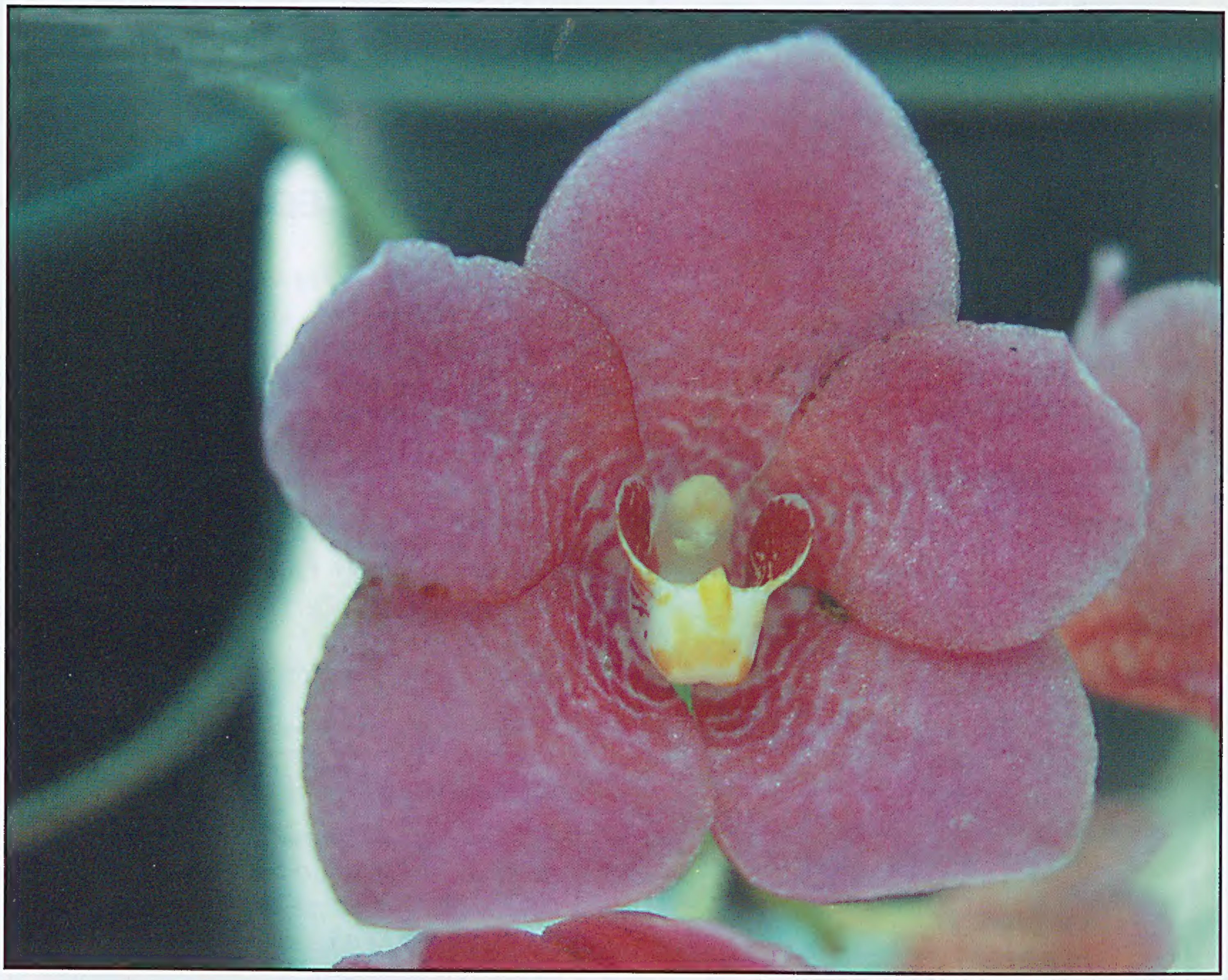

Sarcochilus Memoria Dennis Wood which is Sarco. Dove x Judith
This orchid was bred by Neville Roper and recently registered it in the memory of Dennis Wood. Dennis died after a long illness earlier this year. Dennis was very good grower and a long time member of ANOS.
Photo Neville Roper

President's Report:

By the time Members read this, the ANOS AGM of 2012 may well have been held, and positions on the Executive committee & Councillors may have changed.

It is with deep regret that we have lost a great stalwart in Wal Upton OAM in August. As most Members will be aware, Wal produced 2 books on Dendrobium's and Sarcochilus some time ago, and are always used for reference even today.

On behalf of the ANOS Membership, may I extend to Mrs Upton our sincere condolences for her loss.

I would personally like to sincerely thank each and every ANOS Executive Committee Member and all Councillors for their continued support for the 2011-12 year; their contribution to the ANOS Group has been fantastic.

I encourage ALL Members to endeavour to 'grow' ANOS to it's full potential, through support of your local ANOS Group, the ANOS Website and the Orchadian Magazine that is the flag bearer for Australasian Native Orchids in Australia.

ANOS Groups are encouraged to complete updates to their Website listing, this is a free benefit, and easily adaptable to promote your organisation.

In closing I would like to wish all Members a great flowering year, climate changes have been kind to some areas, whilst others have had a variable season.
Kind Regards
Rick Winch
President – 2011-12

D. Candice 'Ace' X (Delicatum X Aussie Mist 'Spotted')
Kempsey Speciosum Spectacular 2012
Photo Phil Richie

D. Intense Dark X *D.* Lawrose (Our Lawrence X Bardo Rose Jayhurst)
Kempsey Speciosum Spectacular 2012
Photo Phil Richie

Editorial

This issue features a tribute to the life and works of Walter T Upton.

Wal was a foundation member of ANOS and the driving force for its creation he will be missed.

In this issue I have continued showing images of the new registrations.

I took on the editorship of the Orchadian when no one would do the job. We now have a new volunteer in Greg Steenbeeke who will take over after this edition with the new Council.

I have completed what I set out to do and that was to ensure the survival of this important publication. It was always my intention to hand over the reins as soon as someone else wanted to do the job.

I hope that all that suported me will give Greg their support.

Thanks to Graham Slater we halved the printing costs and increased the colour pages. This gives the editor the flexibility to put colour images where they best suit the articles rather than on 16 specfic pages. It was much more diffiicult to lay out the magazine with the previous restrictions.

I would like to thank Irene Bodell for asstistance in putting the magazine in the sleves and sorting them onto the print post boxes.

I would also like to thank Bill Dobson who set up the original templates and advised me.

Thanks to the contributors eapecially Alan Stephenson and Paul Ormarod and those that helped edit the Orchidian.

During my editorship I tried to balance the publication between scientific, conservation, speices and hybrids, this I believe I achived to a limited extent which was restricted by the articles I received.

I enjoyed being editor, but am looking forward to spending more time on other things.

Remember Orchid growing is about fellowship and enjoying the wonders of the orchid world.

My best wishes to Greg Steenbeeke your new editor.

Thanks

Ian Chalmers
Editor

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Vale to Wal Upton OAM

It was with sadness that we learnt of the death of Walter T Upton on Friday, 10th. August. He has left a great legacy to orchid enthusiasts through his involvement in the foundations of many organisations relating to orchids, his innovative hybridizing and his writing.

At the time of his death Wal Upton was a patron of the Australasian Native Orchid Society.

In the foreword to "Dendrobium Orchids of Australia" by Walter T Upton. 1989 L J Lawler of Atherton Qld wrote:

'Wal Upton is well known throughout Australia and beyond as a fine grower of orchids, Ably assisted by Jill Upton, he has directed his energies and expertise to the growing of Australian orchids. He has taken great pains to accumulate a stock of fine plants of *Dendrobium* species and, using these as parents, has proceeded to follow a carefully, thought out programme of hybridisation.'

Again in "*Sarcochilus* Orchids of Australia" Walter T Upton 1992 L. J Lawler wrote in the foreword
'Wal and Jill Upton, well known as the Double-U combination, are recognised in Australia and abroad as good growers of Australian native orchids. That their long-term program of hybridisation, which is both well conceived and imaginative is now coming to fulfilment in this book.'

He was a prolific artist and illustrated both the books and was well known for his botanical illustrations. Wal provided his illustrations to most societies he belonged to for publication in their monthly news sheets. Over the years he has contributed to most magazines and monthly bulletins.

Wal has at least 172 registered orchid hybrids to his name. Most of his breeding was with the Australian Native Orchids, including the first Australian hybrid *Bulbophyllum*, *Bulbo.* Alpha.

Wal's innovative breeding included creating new genera, *Porterara* and Uptonara and it was only a few weeks ago that one of his unusual hybrids *Dendrobium* Pink Ballerina was awarded a HCC-NSW/AOC. *D.* Pink Ballerina has received more recognition since the change to appreciation judging and it has been recognised that big flowers are not always better.

He was a founder member and foundation secretary of Australasian Native Orchid Society and President of the Orchid Society of NSW and a life member of both. He received an Award of Honour from the Australian Orchid Council and member of the Australian Orchid Foundation. He was chairman of the 13th International Botanical Congress Orchid Symposium held in Sydney in 1981. He was both an ANOS Judge and an AOC Judge.
Wal was also a part of the steering committee which formed the Orchid species Society of NSW and was an inaugural member, Committee Member and Patron of the Society and was instrumental in the merger of two societies to form Manly-Warringah Orchid Society.

Wal and Jill won four Ira Butler Trophy awards in the 1980's.

Wal received the AOF Award of Honour in 1997 and the Order of Australia in the Queen's Birthday list in 2007.

He grew up in England, served as a pilot in the RAF in WWII and came to

Australia in 1950.

For all his orchid legacy, those of us who knew him will miss him most for his charm and wit.

Australasian hybrids accredited to Wal Upton

Bulbophyllum

Alpha = *Bulb. longiflorum* x *Bulb. baileyi*

Dendrobium

Andrew Upton = Judy Leroy x Star of Gold
Balranald = jonesii x Gracious Cascades
Bellingen = Bright Spark x Hilda Poxon
Big Fleck = *bigibbum* x *fleckeri*
Bright Spark = John Upton x *tetragonum*
Brolga = Peewee x Hilda Poxon
Buttermilk = Emma x *falcorostrum*
Chablis = *gracilicaule* x *bigibbum*
Chantilly = Kungara x Coljohn
Cockatoo = Peewee x Colin
Colin = Ellen x *jonesii*
Coljohn = Colin x John Upton
Colreka.= Colin x Eureka
Colsboys = Jamie Upton x John Upton
Craig Hewitt = Emmy x *speciosum*
Daddy Longlegs =*atroviolaceum* x *tetragonum*
Dainty Cascades =*pugioniforme* x *mortii*
Dainty Gem = Jombock x *kingianum*
Delemma = Emma x X delicatum
Double Joy = Warringah x *kingianum*
Doug Burgess = Blushing Rose x Coljohn
Duke = Judy Leroy x *tetragonum*
Elanora Star = Rosella x Ellen
Eleebana = Judy Leroy x *bigibbum*
Elegant Autumn =*bigibbum* x Ellen
Elegant Charm = Andrew Upton x *speciosum*
Elegant Coral = Lorikeet x Hilda Poxon
Elegant Falcon = Elegant Heart x *falcorostrum*
Elegant Flame = Elegant Autumn x *speciosum*
Elegant Gem = White Gem [Cascade] x *speciosum*
Elegant Glow = Peewee x Harold Hirsch
Elegant Heart = Peewee x *speciosum*
Elegant Jewell = Elegant Heart x Harold Hirsch
Elegant Lace = Peewee x Ira's Star
Elegant Queen = Suzanne x *speciosum*
Elegant Starlight =Elegant Heart x Bright Spark
Elegant Sunrise =Elegant Heart x Morning Light
Elegant Sunset= Suzanne x Star of Gold
Elfin = Dainty Cascades x *kingianum*
Ella Rose = Ella Victoria Leaney x Blushing Rose
Emma= Gillian Leaney x *tetragonum*
Fairy Floss= Penny Ann x *tetragonum*
Fiesta = Colin x Kim
Fiesta Blush = Fiesta x Blushing Rose
Fiestafal = King Falcon x Fiesta
French Lace = *falcorostrum* x Coljohn
Galah = Peewee x Golden Fleck
Goblin = Emmy x Ellen
Gold Drops = Golden Fleck x *monophyllum*
Goldilocks = Eureka x Jamie Upton
Golligosh = *schneiderae* x *monophyllum*
Gracious Baron =*gracillimum* x Red Baron
Gracious Star = *tetragonum* x Gracious Falcon
Graham Hewitt = Ellen x *speciosum*
Green Cascades =Dainty Cascades x *pugioniforme*
Green Goddess = *adae* x Susan
Green Hue = *engae* x Aussie Green
Green Star = Jamie Upton x Golden Fleck
Harold Hirsch = Suffusum x *speciosum*
Hilda's Heart = Elegant Heart x Hilda Poxon
Hot Pink = Jombock x *bigibbum*
Hot Shot = Hilda Poxon x Golden Fleck
Ice Princess = Emma x Coljohn
Ingleside = John Upton x *speciosum*
Ira Butler = Hilda Poxon x *jonesii*
Ivory Moon = Jombock x Essie Banks
Jamie Upton = *tetragonum* x Golden Fleck
Jamie's Falcon = Jamie Upton x *falcorostrum*
Jayden = Elegant Heart x *speciosum*
John Rose = John Upton x Bardo Rose
John Upton = Kim x Ellen
Jombock = Judy Leroy x Colin
Jonquil = Jombock x *canaliculatum*
Karen Nair = Jamie Upton x Wonga
Kenny Green = Aussie Green x *jonesii*
King Goblin = Goblin x *kingianum*
Kungara = *tetragonum* x *jonesii*
Lemon Glow = Jamie Upton x *speciosum*
Lemon Lace = X *gracillimum* x *mortii*
Lemon Magic = Ruppiosum x *tetragonum*
Liquid Sunshine =*canaliculatum* x *jonesii*
Lorikeet = Peewee x Ellen
Minuet = Penny Ann x Goblin
Morning Light = *tetragonum* x Wonga
Namoi Valley = Galah x Ellen
Narellen = Narraweena x Ellen
Narraweena = Colin x Gillian Leaney
Nugget = Eureka x *gracilicaule*
Nunkumbil = *tetragonum* x Eureka

Orana = *adae* x *monophyllum*
Parakeet = Peewee x *monophyllum*
Penny Ann = X *gracillimum* x *kingianum*
Penny Rose = Penny Ann x Bardo Rose
Peter Hewitt = Hilda Poxon x Hastings
Pink Ballerina = *agrostophyllum* x *bigibbum*
Pink Blush = Jombock x *speciosum*
Pink Crystal = Jombock x John Upton
Pink Elee = Eleebana x *kingianum*
Pink Harmony = Jombock x Goblin
Pink Ice = Eureka x *bigibbum*
Pixie = Ellen x Suffusum
Piximum Pixie x *gracillimum*
Purity = Duke x *falcorostrum*
Purple Imp = Pixie x *kingianum*
Red Ballerina = Pink Ballerina x *bigibbum*
Red Baron = Blushing Rose x *kingianum*
Red Flush = Colin x Red Baron
Red Imp = Impact x *spectabile*
Red Squire = Jombock x Red Baron
Regal Rose = Blushing Rose x speciosum
Registration pending = *linguiforme* x *pugioniforme*
Ring of Fire = Ku-Ring-Gai x John Upton
Rosehill = Rosella x Hilda Poxon
Rosy Spectre = David Baver x Bright Spark
Sarah Jane = Elegant Heart x *jonesii*
Shirley Hilton = Aussie Green x *speciosum*
Silver Eye = Peewee x Bright Spark
Silvester = *tetragonum* x Bardo Rose
Singleton's Pride =Rosella x Nunkumbil
Star White = Duke x *speciousum*
Strioling = *striolatum* x *linguiforme*
Sunspot = X *gracillimum* x *monophyllum*
Toowoomba Gold = Lemon Glow x Karen Nair
Twinkle = Penny Ann x *falcorostrum*
Wakehurst = John Upton x Kungara
Walter Upton = *mirbelianum* x *nindii*
Warrambool = Ellen x *falcorostrum*
Warringah = *bigibbum* x *speciosum*
Wesley Pink = Virginia Jupp x *fuliginosum*
Wesley Rose = Pink Pencil x *speciosum*
White Mist = Jombock x Harold Hirsch
Whitehart = Nunkumbil x adae
Wirruna = Hilda Poxon x fleckeri
Yellow Dawn = Eleebana x Harold Hirsch
Yellow Glow Emma x *speciosum*
Zuchini = *wassellii* x *cucumerinum*

Dendrogeria

Mistique = *Den.* Ellen x *Flkga. comata*

Plectochilus

Lynore = *Sarco.* Mavis x *Plrhz. tridentata*

Sarcochilus

Cherie = Fitzhart x *fitzgeraldii*
Cream Cake = Marion x *hartmannii*
Emily = Mavis x *australis*
Frances = *ceciliae* x *hirticalcar*
Jane = *ceciliae* x *australis*
Judith = Melba x Fitzhart
Kathy = Mavis x *ceciliae*
Leone = Melba x *olivaceus*
Marion = Fitzhart x *olivaceus*
Melody = Melba x *fitzgeraldii*
Millie = Mavis x *hillii*
Penny Ann = Pinky x *australis*
Selcher = *Sarco.* [*Prcls.*] Selwyn x Cherie
Selina = Arcadia x *fitzgeraldii*
Selmann = Sarco. [Prcls.] Selwyn x *hartmannii*
Sue = Empress x Kathy
Sweetie = Mavis x *hirticalcar*

Orchids with one parent Australasian

Leaneyara

Rosy Charm = *Srts.* Blue Knob x *Ascda.* Rumrill

Porterara

Blue Boy = *Srts.* Blue Knob x *V. coerulea*

Sarconopsis

Elanora *Sarco.* Mavis x *Phal.* Comtesse Bettina

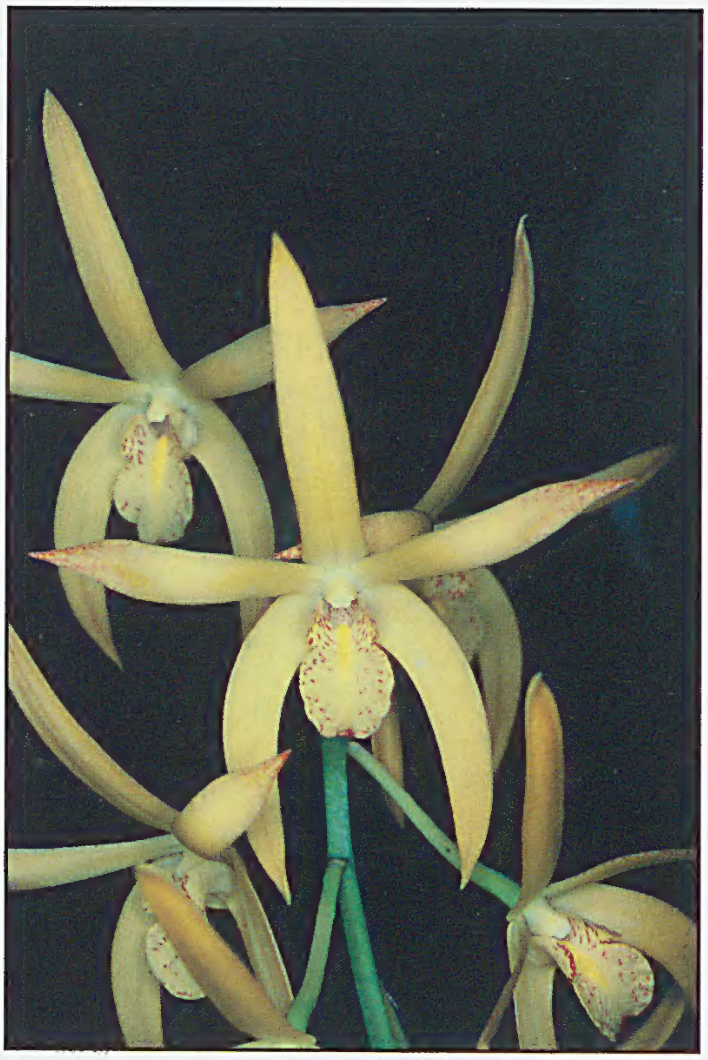
Uptonara

Jill = *Srts.* Blue Knob x *Srnps.* Lavinia

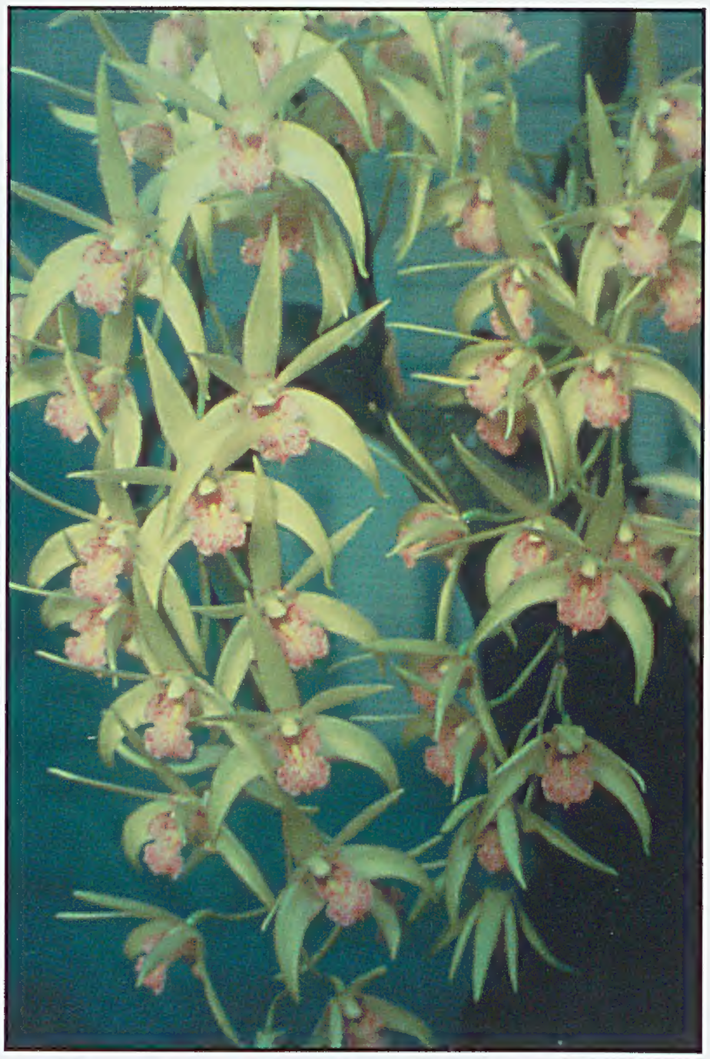
Walter T. Upton left a legacy of wonderfull breeding including pioneering many incitefull crosses for there time.

Wal's breeding was not limited to Astralasian orchids. Wal made at least 10 exotic crosses many between unusual genera.

There are probably just as many hybids made by Wal that were not registered and hybrids that were registered by others.



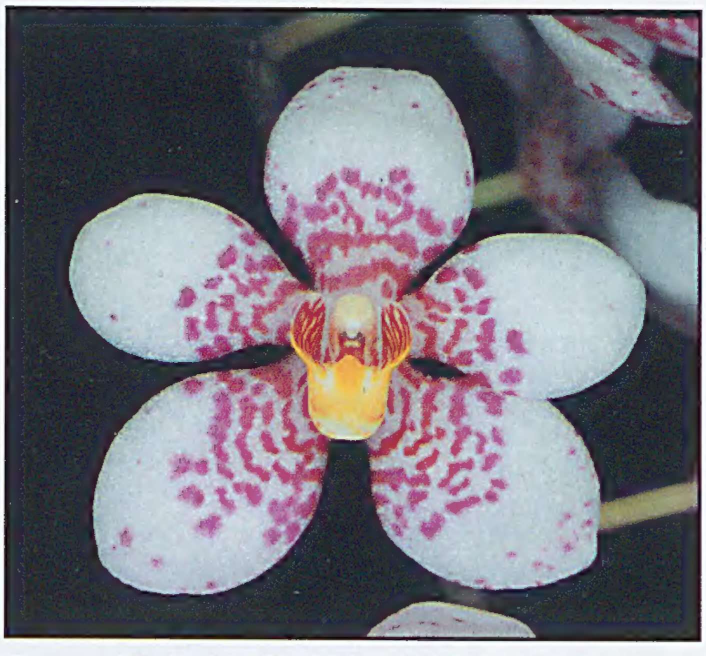
D. Elegant Heart 'Juss' HCC ANOS



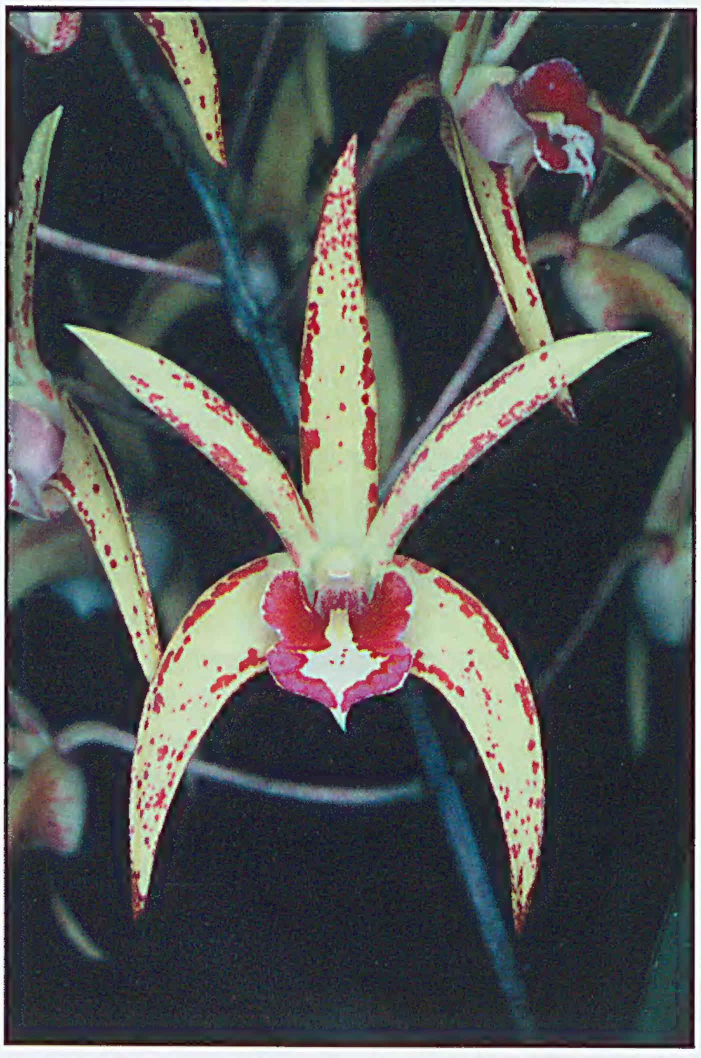
D. Emma 'Suzy' HCC ANOS

Awarded orchids where Wal Upton registered the cross. Note: some of them could be remakes.

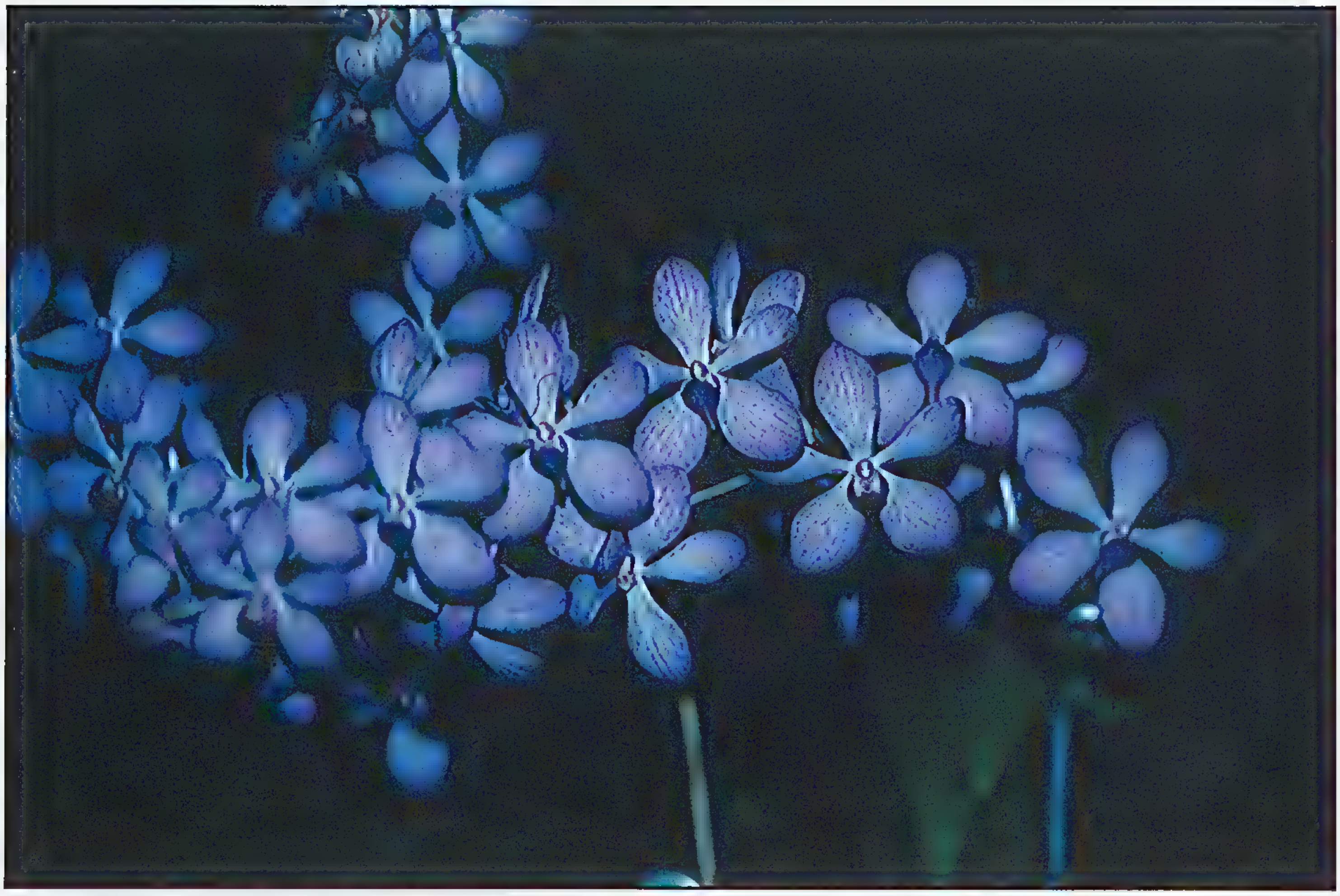
Sarco. Melody 'Bubbles' photographer G Bromley other images from ANOS Award Collection



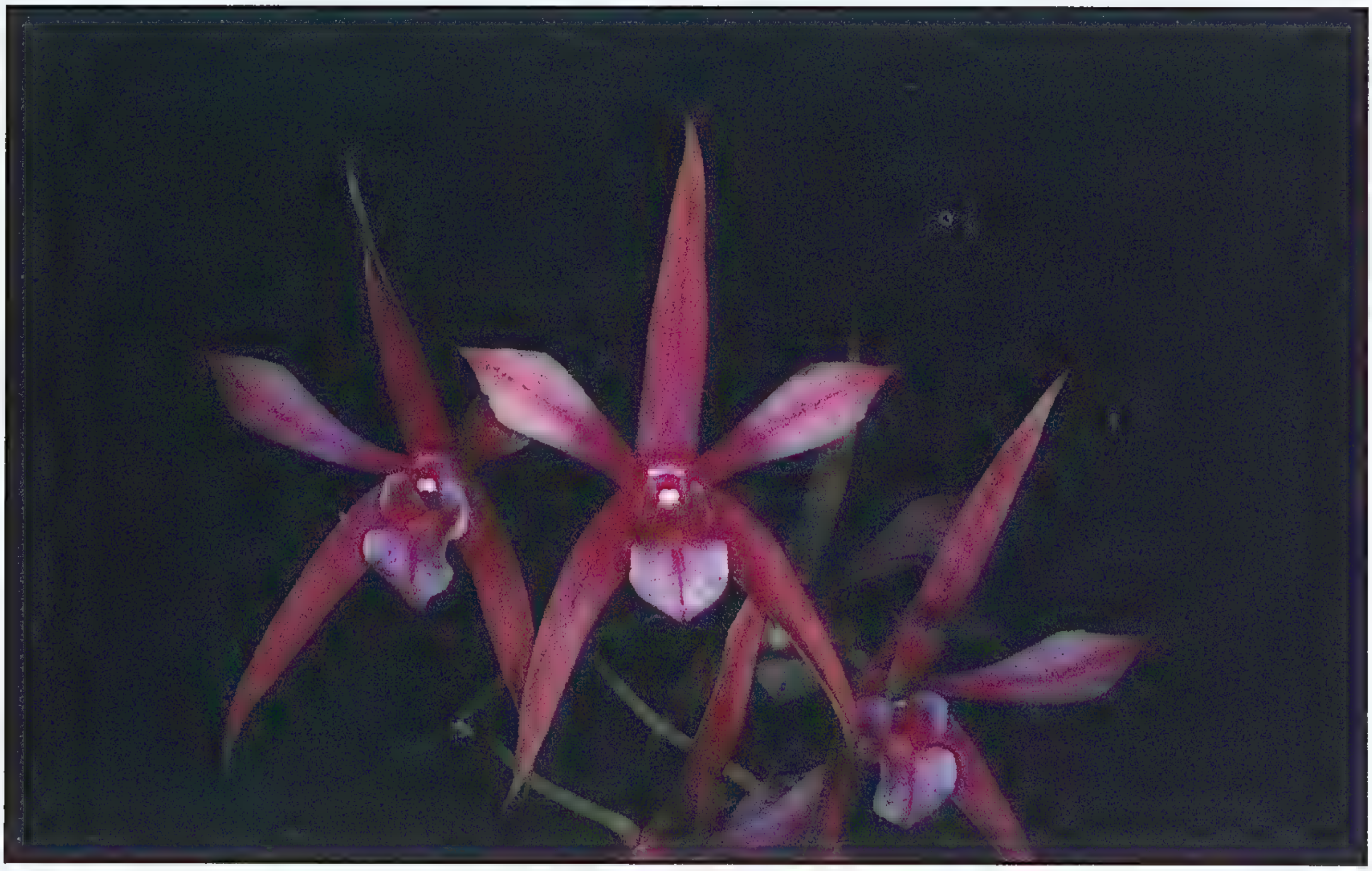
Sarco. Melody 'Bubbles' HCC-AOC/NSW



D. Warrambool 'Red Wings' HCC ANOS



Porterara Blue Boy 'Jill' HCC AOC/NSW Awarded to W & J Upton, bred by Wal Upton



D. Elegant Lace 'Kariong' HCC-AOC-NSW Awarded to W & J Upton, bred by Wal Upton

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7th Australasian Native Orchid Conference & Show Strathpine 2013

The A.N.O.S Queensland Kabi group have gladly taken the opportunity to host the 7th National Australasian Native Orchid Society (A.N.O.S) Conference and Show. The conference will be held from the 21st to the 25th August 2013 at the Strathpine Community Centre. We look forward to showcasing the many Australasian orchids that will be on display with a large contingent from local societies of South East Queensland and northern New South Wales and welcome participation and entries of Australasian Native orchids from all societies and individuals.

We have been busy and have our committees up and running. The venue, Strathpine Community Centre is well lit and spacious, easily able to showcase the orchids and displays that are an intrinsic part of any conference.

The theme for the conference is "Nature's Diversity" and the conference emblem is the beautiful *Phaius bernaysii* which is an endangered species from south east Queensland.

The committees are working on the many areas to make this a great conference; enticing the best speakers to share their knowledge and vendors that will have the jewels we treasure, to make your experience of the 7th A.N.O.S Conference and show a memorable and enjoyable time. Mingle with fellow enthusiasts where friendships from Australia and also the world are made and old ones are rekindled. The Kabi society will keep all the latest up to date information posted on their web page www.ourshopfront.com/kabi

We look forward to seeing all those that share the passion of growing Australasian orchids from all over the world. The orchid community will be kept informed as speakers and vendors are confirmed through the various orchid magazines and other publications.

Regards
The Conference Marketing Committee

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Diuris systena, a new species of *Diuris* subgenus *Xanthodiuris* sect. *Pedunculatae* from the Northern Tablelands of NSW

David L. Jones[1] and Lachlan M. Copeland[2]

[1]*Kalaru, NSW 2550, Australia*

[2]*Botany, University of New England, Armidale, NSW 2351, Australia*

Abstract

Diuris systena, a new species with affinities to *D. chryseopsis*, is described from the Ebor district on the Northern Tablelands of New South Wales. The species has a highly restricted distribution, is known from relatively few plants, and is considered threatened at all of its known locations.

Key Words

Orchidaceae, *Diuris systena*, *Diuris chryseopsis,* new species, vulnerable, conserved, Australian flora, New South Wales.

Introduction

Recent field studies have revealed the presence of an undescribed species of *Diuris* from the Northern Tablelands of New South Wales. Previous workers have probably included the taxon in a broadly circumscribed *D. lanceolata* Lindley, with Bishop (1996) for example, stating that *D. lanceolata* occurred south from the New England Tablelands. More recent treatments now regard *D. lanceolata* as being endemic to Tasmania, however, (Jones 1998) while plants formally included under this name occurring on the Australian mainland south from about Sofala are now referrable to *D. chryseopsis* (Jones 2006). Plants in this broader complex with a disjunct distribution from the NSW Northern Tablelands, which are closely allied to *D. chryseopsis*, are described here as new.

Taxonomy

Diuris systena D.L.Jones & L.M.Copel., ***sp. nov.***; affinis *D. chryseopsidi* D.L.Jones, sed habitu fortiore (plantis usque ad 35 cm elatis); foliis pleraque 2–3; floribus majoribus (30–35 mm latis); petalis laminis longioribus et angustioribus; labello medilobo ovato ad ovato-lanceolatum, ultra medio apice acuto vel fere acuminato argute contracto, differt.

[latin diagnosis – "With affinity to *D. chryseopsis* D.L.Jones but by habit more robust (plants to 35 cm tall); leaves mostly 2-3; flowers larger (30-35 mm across); petal laminae longer and narrower; and, labellum midlobe ovate to ovate-lanceolate, tapering sharply above the middle to an acute or almost acuminate apex, it differs"].

Type: New South Wales: Northern Tablelands: c. 5 km SW of Ebor, 30°26'S, 152°19'E, *L.M. Copeland 4114*, 23 Oct. 2006 (holo CANB; iso K, NE, NSW). (Specific locality details withheld for conservation purposes).

Description: Glabrous *terrestrial herb* growing singly or in loose groups. *Leaves* semi-erect, 2-3, basal, conduplicate, narrowly linear-lanceolate, 15-35 cm long, 3-5 mm wide, green; base sheathing; apex acute. *Inflorescence* 15-35 cm tall, stout, green. *Sterile bracts* 2-3, closely sheathing, the bottom one sometimes extended and leaf-like, ovate-lanceolate, 50-120 mm long, 6-8 mm wide, acute to acuminate. *Fertile bracts* closely sheathing, narrowly ovate-lanceolate, 20-50 mm long, 3-5 mm wide, acute to acuminate. *Pedicels* 30-60 mm long, very slender, straight. Ovary obovoid, 5-8 mm long, 2-4 mm wide, green with brown ribs. *Flowers* 1-4, porrect to semi-nodding, 30-35 mm across, lemon yellow, often with dark striae on the dorsal sepal and labellum, the lateral sepals brownish green. *Dorsal sepal* porrect in the proximal third then obliquely erect, ovate to ovate-lanceolate, 9-15 mm long, 4-6 mm wide, base greenish brown with a few short striae, rest lemon yellow; apex obtuse to emarginate. *Lateral sepals* obliquely deflexed, parallel, ensiform, 18-25 mm long, 2-3.5 mm wide; margins involute; apex asymmetrically acute to acuminate. *Petals* spreading horizontally, widely divergent; lamina narrowly ovate-lanceolate to narrowly elliptic-lanceolate, 8-18 mm long, 4-6.5 mm wide; apex obtuse to acute; claw 3-6 mm long, blackish, widest near the lamina, tapered to the base. *Labellum* porrect to obliquely decurved, 12-17 mm long, deeply 3-lobed; lateral lobes erect, linear to narrowly oblong-cuneate, 2-4.5 mm long, 0.8-2 mm wide; outer margins shallowly to deeply and irregularly toothed or lobed, papillate; midlobe narrowly to broadly ovate to ovate-lanceolate, 8-15 mm long, 7-12 mm wide, flat apart from a shallow, central, longitudinal ridge; margins entire or plicate; apex acute. *Callus* densely papillate-hirsute, consisting of 2 marginal ridges on the basal neck of the midlobe and a central ridge developed mainly on the base and central parts of the lamina of the midlobe, sometimes a couple of small accessory ridges developed at its base, usually darker yellow than the lamina. *Column* porrect from the end of the ovary, 3-3.5 mm long, c. 3 mm wide. Column wings ovate-lanceolate, *c.* 3 mm long, *c.* 1.3 mm wide; margins irregular. *Stigma* cordate, *c.* 3 mm long, *c.* 2 mm wide. *Anther* ovate, *c.* 2 mm long, *c.* 2 mm wide, brownish. *Pollinarium c.* 3 mm long, *c.* 2 mm wide; viscidium elliptic, *c.* 0.8 mm long; pollinia clavate, 2.8 mm long, white, mealy. *Capsule* ellipsoid to obovoid, 10-13 mm long, 4-5 mm wide, green.

Additional specimens examined: New South Wales: Northern Tablelands: Bullock Creek, *P. Metcalfe s.n.* (NE46632), 3 Oct 1971, (NE); Cathedral Rock National Park, *J.B. Williams s.n.* (NE57771), 10 Oct 1992, (NE); Ebor, *L.M. Copeland 3832*, 1 Nov 2004, (CANB, NE, NSW); Wards Mistake Rd, c. 25 km NE of Guyra, *L.M. Copeland 4107*, 16 Oct 2006, (CANB, NE). (Specific locality details of all specimens withheld for conservation purposes).

Distribution: Currently known from four subpopulations in the Ebor to Cathedral Rock district of the New England Tableland, with an additional, somewhat disjunct population 50 km to north-west in the Wards Mistake district.

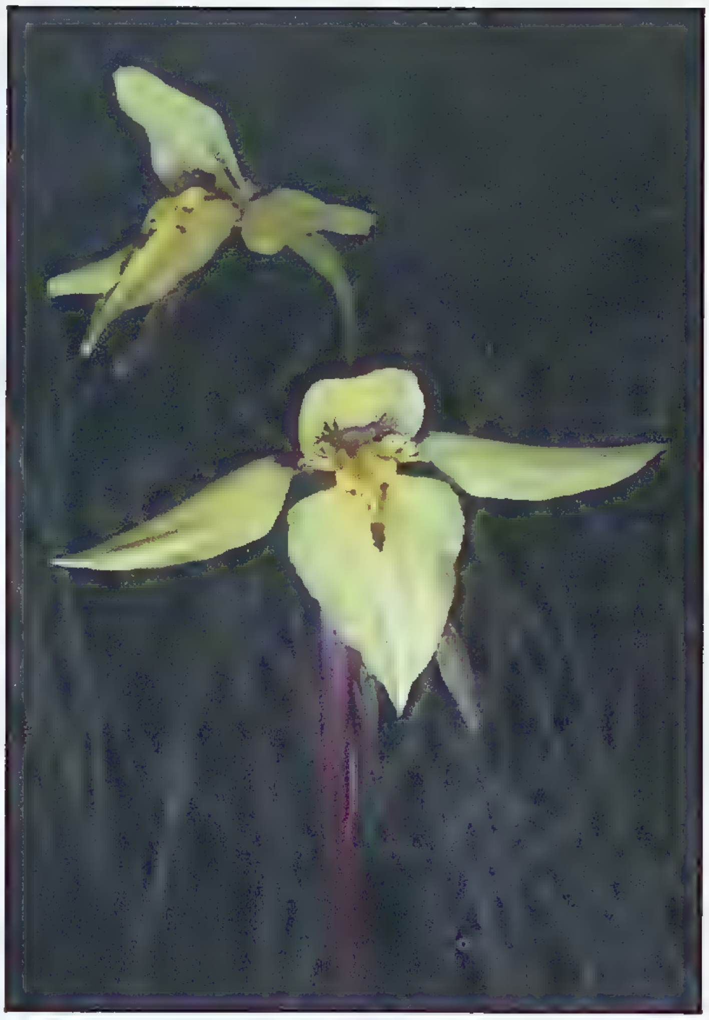
Habitat: *Diuris systena* favours moist areas around the margins of swamps although occasional plants have been observed growing upslope in drier habitats. Soils are moist, peaty loams derived from basalt (Ebor populations) or granite (Cathedral Rock National Park and Wards Mistake Rd). Altitudes range from 1290-1330 m. Associated species include scattered trees of *Eucalyptus stellulata* and *E. nova-anglica* and various shrubs such as *Leptospermum gregarium*, *Epacris microphylla*, *Baeckea omissa* and *Hakea microcarpa*. Grasses and forbs include *Poa sieberiana*, *Baloskion stenocoleum*, *Xerochrysum bracteatum* and the exotic *Anthoxanthum odoratum* and *Leucanthemum vulgare*.

Flowering: Late September to early November.

Conservation status: *Diuris systena* has a restricted distribution and is currently known from fewer than 300 individuals. Only one small population is known to occur in a conservation reserve (Cathedral Rock National Park), although these plants appear to have declined in recent years. Current threats to other populations include alteration/draining of their swampy habitat, competition with the aggressive Oxe-eye Daisy (*Leucanthemum vulgare*), slashing of roadside plants at inappropriate times (e.g. in the spring growing/flowering), and heavy grazing. Most plants occur along unfenced roadsides and are prone to frequent disturbance. We suggest a ROTAP code of 2VCi following the criteria of Briggs & Leigh (1996). The species is also likely to meet the requirements for listing on the *NSW Threatened Species Conservation Act 1995* as either Vulnerable or Endangered.

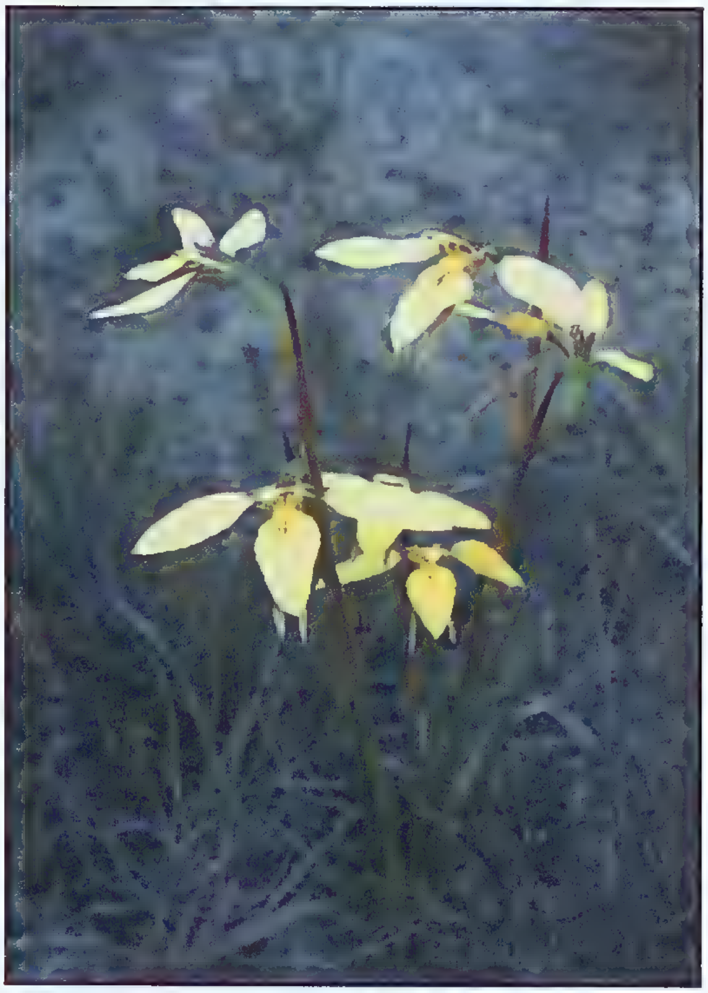
Etymology: From the Greek *systenos*, tapering to a point, in reference to the shape of the apical part of the labellum midlobe.

Recognition: *Diuris systena* is characterised by the robust habit (plants to 35 cm tall); leaves mostly 2, occasionally 3; relatively large (30-35 mm across) lemon yellow flowers, usually with short dark striae on the labellum and dorsal sepal; narrow petal laminae; small, narrow labellum lateral lobes with irregularly lobed or toothed papillate margins; ovate to ovate-lanceolate labellum midlobe that tapers sharply above the middle to an acute or almost acuminate apex; and papillate callus consisting of 2 marginal ridges on the basal neck of the midlobe and a central ridge developed mainly on the base and central parts of the midlobe lamina.



Diuris systena from Ebor

L. Copeland



Diuris systena from Wards Mistake

L. Copeland

Similar species: *Diuris systena* is part of a group of species surrounding *D. chryseopsis*. It is distinguished from *D. chryseopsis sens. str.* by its more robust habit; fewer leaves (2-3) that are much longer and broader at the base; larger flowers; larger petals, usually with a narrowly ovate-lanceolate lamina (occasionally elliptical-lanceolate); and a larger labellum with an ovate to ovate-lanceolate midlobe that tapers sharply above the middle to an acute or almost acuminate apex. The latter character is significant because it immediately distinguishes *D. systena* from all other members of the *D. chryseopsis* complex in which the labellum apex ranges from broadly obtuse to subobtuse.

The new species grows sympatrically with *D. pedunculata* R.Br. but the latter species is much less robust with smaller flowers, elliptical petals held close to the labellum base and very small (almost vestigial) labellum lateral lobes. Occasional hybrids occur between the two species.

Notes: *Diuris systena* belongs in *Diuris* subgenus *Xanthodiuris* section *Pedunculatae* (Jones & Clements 2006). With the exception of *D. pedunculata* (2 leaves) and *D. systena* (2-3 leaves), all other species in this section have an erect tuft of 5-9 leaves.

Diuris systena forms putative hybrids with *D. abbreviata* Benth. and *D. pedunculata* where the three species all grow sympatrically.

Acknowledgements

We thank Peter Metcalf of Armidale for discussions on this species and Laurie Adams for assistance with the latin diagnosis. Staff of the N.C.W. Beadle Herbarium at the University of New England are also thanked for allowing full access to their collections which housed several old specimens of *Diuris systena*.

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THE VAGARIES OF WEATHER

This year of 2011 is the 20th year since I began keeping rainfall records at my home in Nowra and probably the reason I began is directly related to my orchid growing which had begun only a few years earlier. I soon learned what rain fell in the Shoalhaven area and how much it differed from official records which are used in the daily calculation for the annual average.

The official recording station is at the naval base HMAS Albatross, which is 6.5 km in a direct line from my home (10 m ASL). The problem with this station is that it is located at the top of Nowra Hill (197 m ASL) which overlooks the base and the entire local area from the coast to the escarpment and to the west. In other words it is the only visible hill for a distance of almost 18 km in any direction and the rain recorded rainfall bears little resemblance to that which actually falls in the business area or anywhere north of the Shoalhaven River. The average is alleged to be 1150 mm but in these 20 years my average is 858 mm and only in four of those tears have I recorded more than 1000 mm per annum, with the highest being 1275 mm in 1998 and the lowest of 556 mm in 2009.

The reason I am writing this article is that after returning to a slightly better than average rainfall in 2010 (991 mm), following several years of drought, the hope was for 2011 to have another year of the same. However despite very good falls in November (174 mm) and December (98 mm) of 2010, this year began with falls 50% below the monthly averages for January and February.

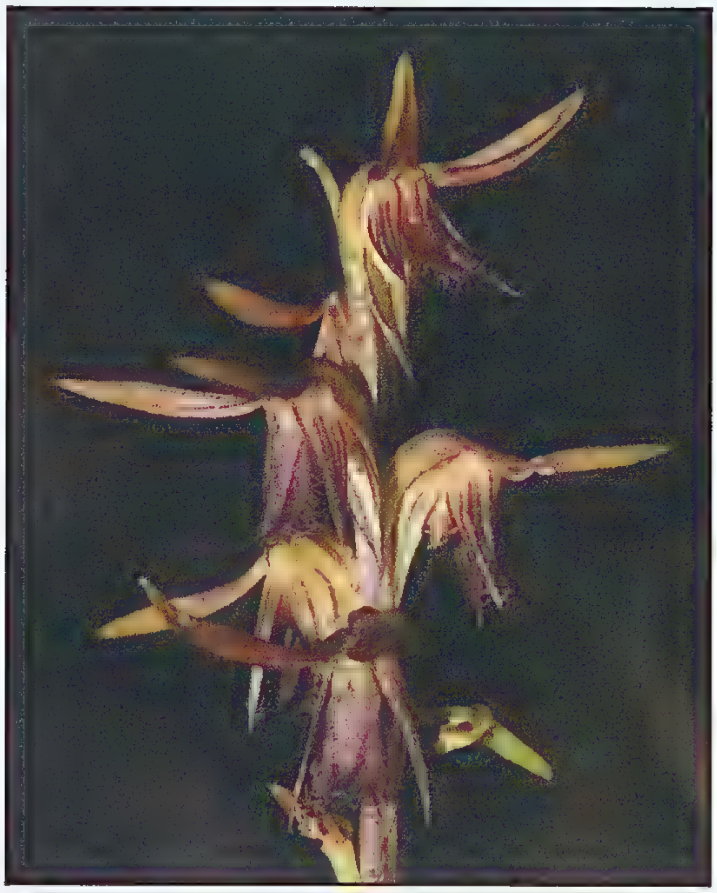
These facts hit home recently when I was attempting to upgrade data I had collected in 2010 regarding the flowering of *Genoplesium baueri.* The data was collected for the purposes of writing a submission to have the species listed as Critically Endangered under both Commonwealth and State environment legislation. I had been told many times over the years by Leo Cady, who is a close friend and advisor, that this orchid group will only produce good flower numbers six weeks after a significant fall of rain. For several years I thought this was an old wives tale because no figure had been mention about what constituted significant rainfall. Now that I have been converted to this line of thinking, I have assumed a significant fall (in a 24 hour period) to be 20 mm -25 mm). This figure is what I use as a guide for my area, as I am aware some states would see this as quite heavy while others would consider it to be only nuisance rain but over the past few years that figure has proven reliable.

Chil. seminuda leaves

To further implicate the weather pattern (or inconsistency) a trip on March 18th to an area about 30 km south of Nowra, saw a normally reliable colony of *Chiloglottis seminuda* presenting a great display of leaves but not a flower in sight and not even a hint of anything emerging from the centre of the rosettes. This population is normally in flower in mid-February but I feel the only reason we saw any leaves at all was as a result of the very heavy rain which fell in mid-March.

Also on February 5th I travelled to a former apple growing district on the NSW Southern Highlands to yet again search for an endangered *Corunastylis* species. My companion for the day was Denis Wilson and as we are both retired (from paid work), enjoy regular outings looking for and photographing orchids and other things of interest. We had been to this site for the past three years failing to locate a plant in flower but this year managed to find a lone flowering specimen. This species is said to begin flowering in late February and this was to be the first of at least two visits. *Corunastylis plumosa* is in low numbers and three populations have been the subject of monitoring for the past 10 years by the Department of Environment,

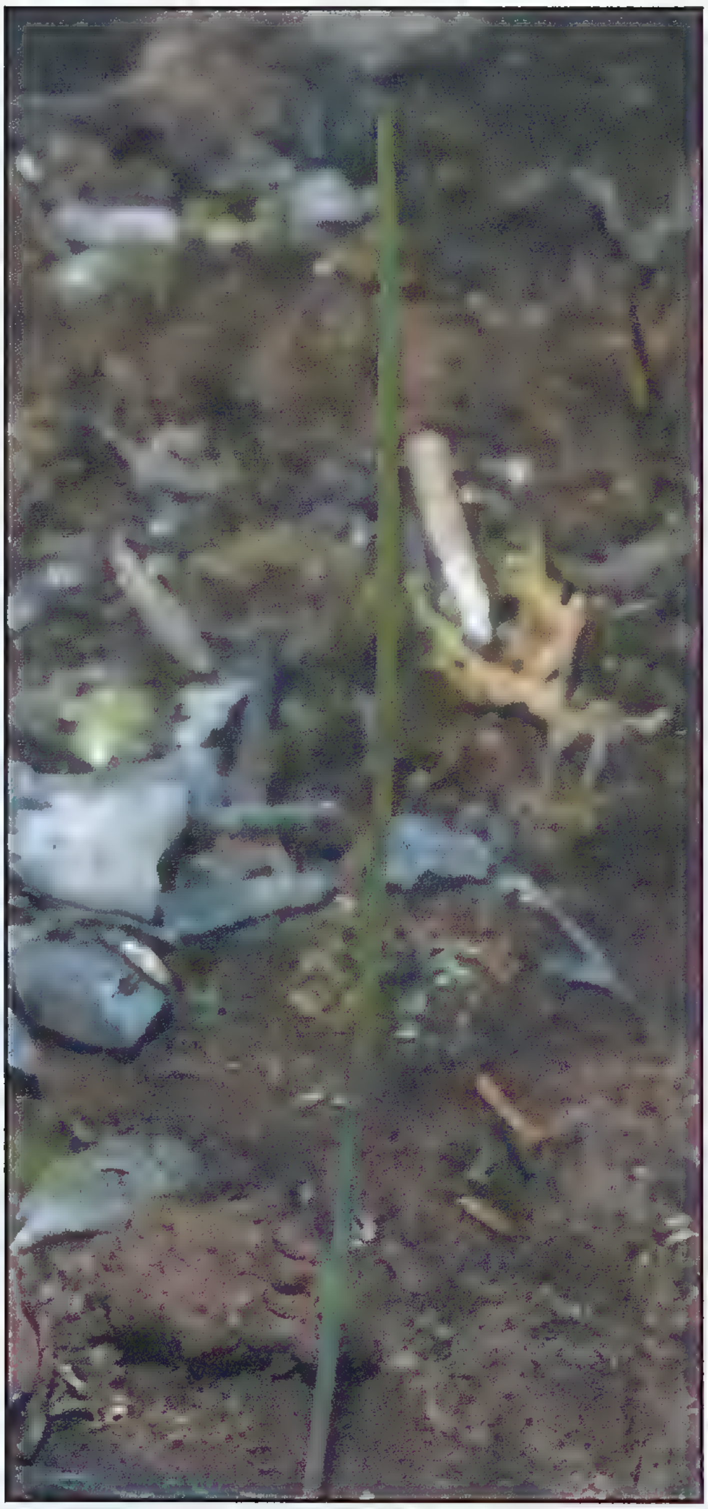
Climate Change and Water (DECCW). The monitoring is important particularly as prior to the amalgamation of the Goulburn and Mulwarre Councils the Mulwarre Council gave approval for a landowner to construct a large shed on his property and a chain of events followed. The first was that no surveys for *C. plumosa* were undertaken as DECCW were not consulted, materials were deposited on the site, the concrete floor of the shed was poured, the frame erected but after this work has ceased with no further progress has been made. As one would expect the shed was constructed over the largest population known to exist, with all 90 plants lost and the materials on the site remain untouched to this day. A further problem with this orchid is that for some mysterious reason this particular area is currently the centre of a possible building expansion with several lots nearby being subject to purchase/development intent and the now Goulburn/Mulwarre Council is considering subdivision plans for larger local properties.



Corun. plumosa

Now, as we factor in the vagaries of the weather while undertaking the annual population monitoring, I can say no new plants were located this year and flowering plants were limited to less than

Corun. plumosa stem 100 mm

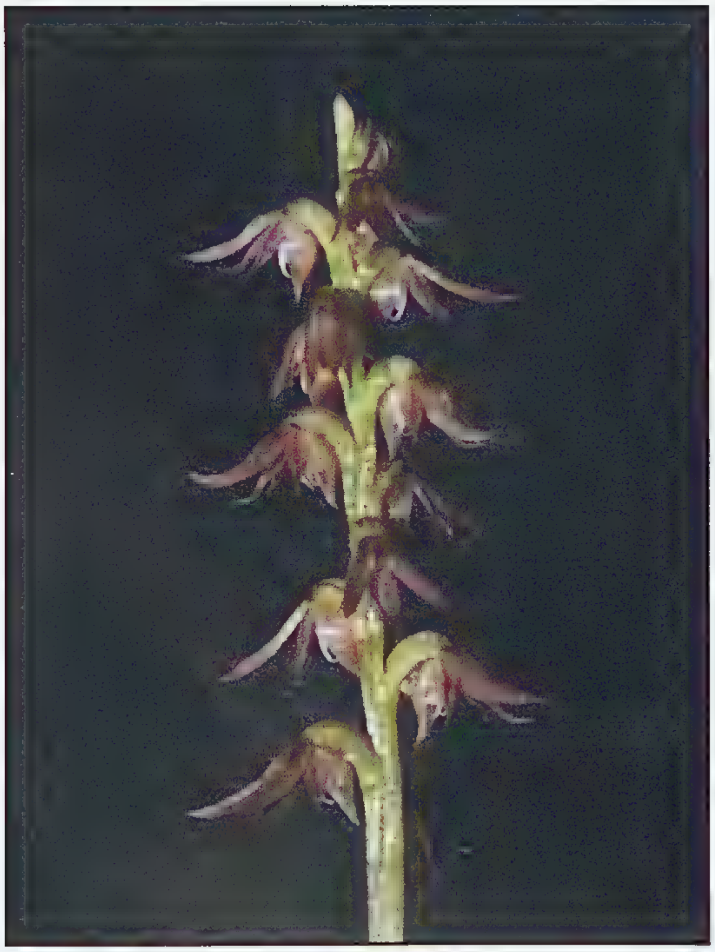


Corun. laminata stem 110 mm

a handful over the three populations. During the monitoring many new growths were noted but all of these were even more slender than those which produce flowers. Flowering plants have a stem width of approximately 1.5 mm but the stems recorded without flowers were less than 1 mm. This might not seem much of a difference but when viewed *in situ,* the difference is noticeable and not one of these plants showed any signs of producing a flower, despite their height being approximate to those which do flower. Using only observation and some experience I feel safe in predicting these stems will not produce a flower this season, simply because of the lack of rain at the correct time. The same principle applies to a population of Chiloglottis seminuda which regularly flowers in late February, however this year while leaves were plentiful, not one rosette had produced a flower to mid-April. Late rain might be good in that it produces something in the way of a strong tuber but that something must be able to retain viability until the seasonal roundabout begins next year. The incidence of stems with no flowers was noted across the few areas where *C. plumosa* occurs.

Corun. laminata

I have noted similar occurrences during the monitoring of populations of *Prasophyllum affine* over the past 10 years. In 2006 during September and October only 0.5 mm of rain was recorded for a period of 50 days and as *P. affine* plants flower in the first few


Corun. despectans

weeks of November, the 23 mm which did fall in that period was too late to produce flowers. Some plants recorded during the June survey (for leaves only) managed to open some flowers opening on the lower section of the inflorescence but the middle section was withered and when rain fell some plants tried to produce flowers on the upper section. This was odd to say the least and I ask the reader to picture flowers on a stem then a withered section followed by more flowers and I could not blame anyone for requesting a check of the contents of my Thermos. Again the main feature is that rain at the right time is essential for terrestrial orchids to flower well and even more crucial is that both *C. plumosa* and *P. affine* are endangered species and limited to a few sites only.

Little of the information contained here should be much of a surprise to those who get out and about to see things but after 2010 was a better than average year I was hoping for 2011 to provide a mirror image. My hope was for a paper to be written regarding the long-term monitoring results of at least two threatened species orchid plots being monitored by the DECCW in which I have been involved, however two consecutive good years might be hard to achieve.

Corun. sp. stem tallest is 210mm

The only point I can make from all of the preceding is one which all orchid seekers and growers would already know and that is we need to recognise the vagaries of the weather and work according to those findings. We have no control over what happens and all we can do is be aware of the changes and work accordingly.

Alan W Stephenson
National Conservation Officer
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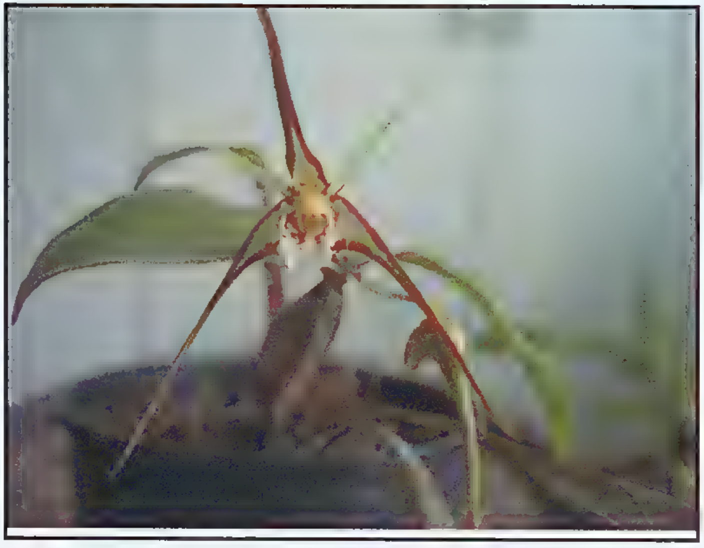
Photographs Alan Stephenson

The Influence of *Dendrobium tetragonum.*

The species that occurs along the Eastern Australian sea board,
mostly in rain forests, and semi-shade.

There are several varieties which change from the Southern Regions to the far North in the tropics. Some varieties vary in colour, from light green / cream in the South, to some spectacular colours as the varieties are found further North.

So how does the ill-informed identify a primary hybrid native, with other complex hybrids without the *D. tetragonum*



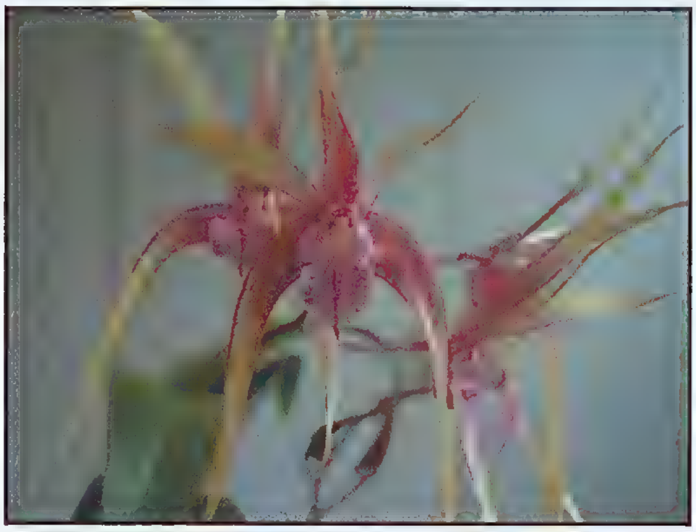
D. tetragonum

Firstly, go back to the species *D. tetragonum.* One will notice the shape of the canes, without any magnifying glass, or reading glasses. Yes, the shape of the canes. At the base, there is a slim firm stem attached to the mother plant, which will form a square section, until it again forms a round section at the apex where the two or three leaves appear, the flowers are borne during the flowering season. See the examples in the image.

Any blind person can feel the shape of the cane, that it is basically square in section. Identification is quite evident. All primary hybrids, and complex hybrids, carry this feature, though the shape of the canes might be showing some shape of having the square canes, evident. This depends on the amount of species involved, with the complex hybrids.

The other feature is the shape of the flower, as being starry, like the *D. tetragonum* flower itself. Some of the other complex hybrids may have this feature predominant.

Next, is the shape of the segments:-



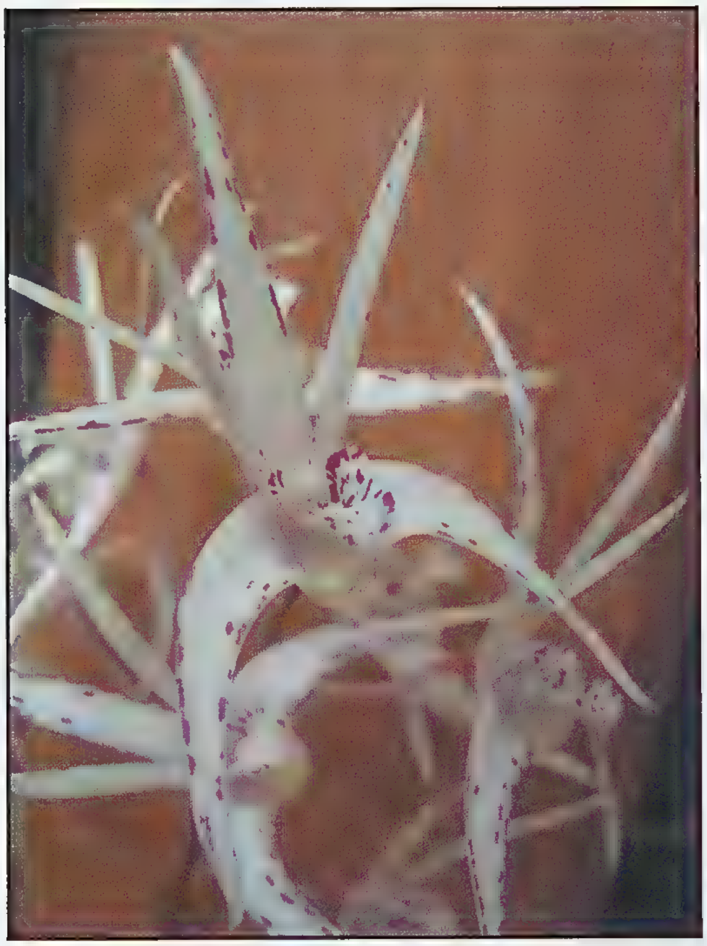
D. Regal Gilleston.

This plant came into my possession, some years ago, and was selected by the judges, and the member's popular vote for the Society meeting .

It is a combination of:- *Den.* Suzanne. = (*bigibbum x tetragonum.)* x *Den.* Regal Affair. = *Den.* Ku-Ring-Gai . x Star Imp.= *tetragonum x adae. tetragonum. x* X *delicatum. = speciosum x kingianum.*

Details of the plant are:-

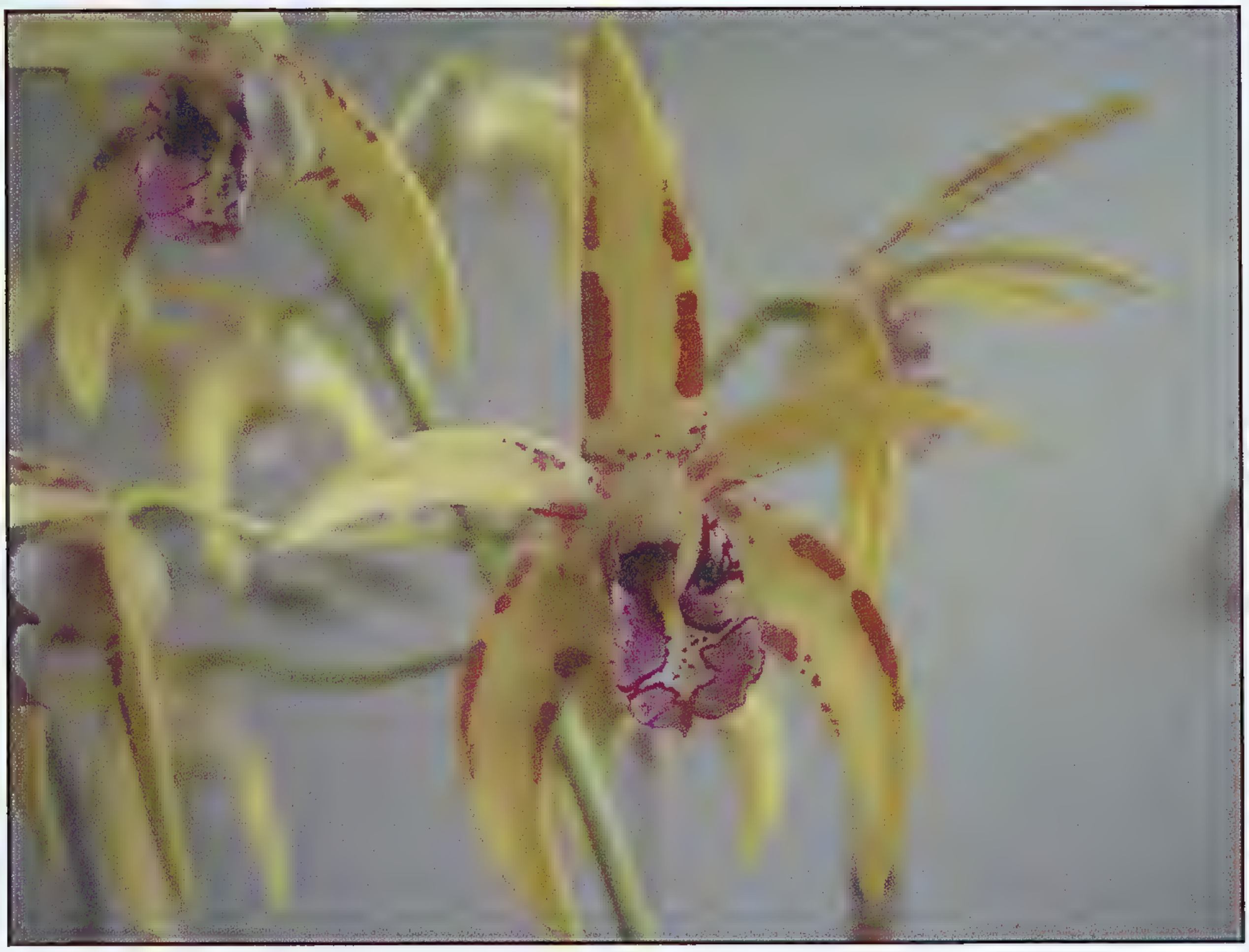
Size of flower:- L. 98 mm. x W. 42 mm.
Colour:- Base colour: Light, Yellow – Cream over-laid the Segments and Labellum, with Maroon / Red spots Stripes & Blotches.



D. Aussie Starlight.

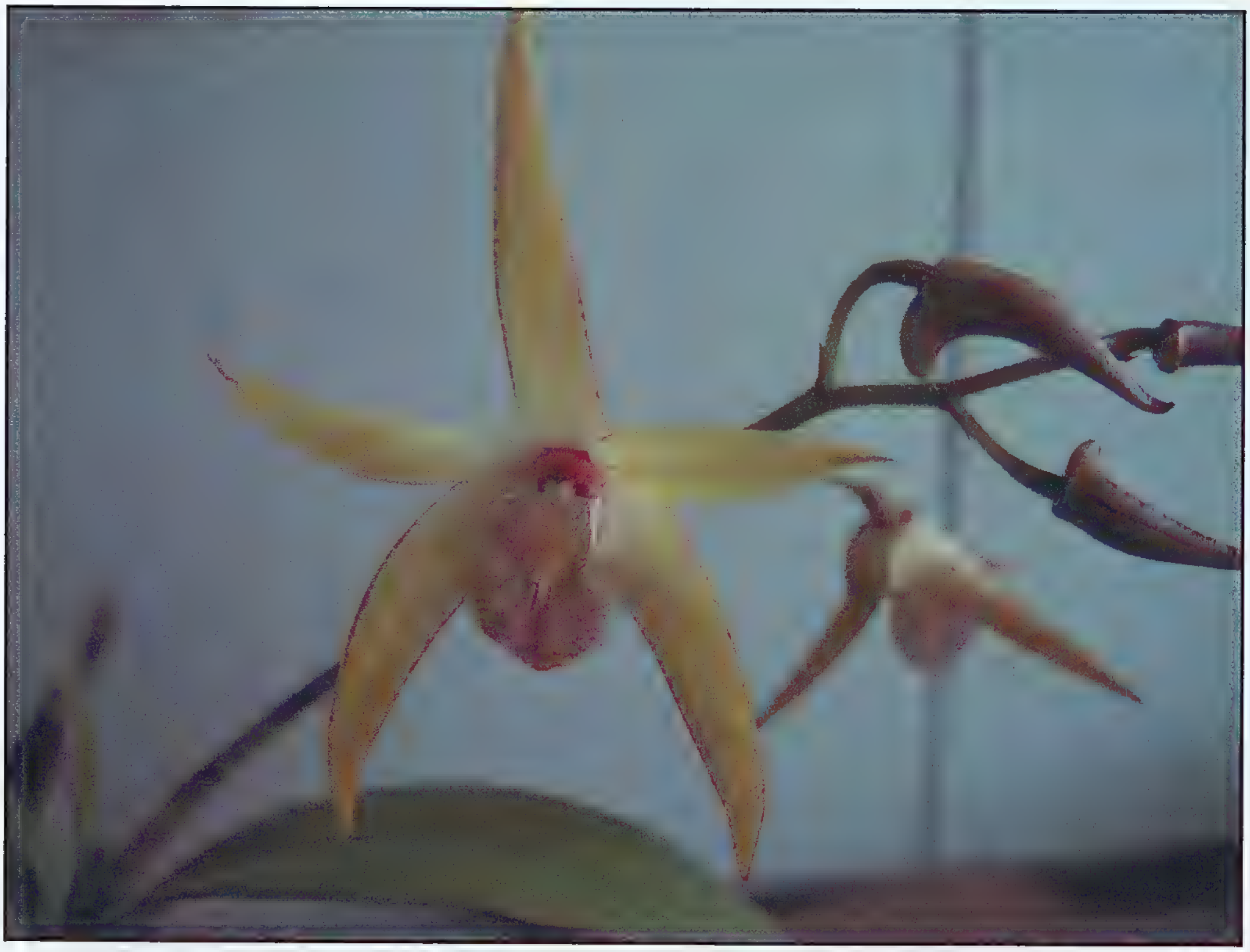
D. Aussie Starlight:-
= Aussie Ira x *speciosum.*
= Ellen x *tetragonum.*
= *kingianum x tetragonum.*

Colour:-
Base Colour: White, with Spotting on edges of Sepals, Petals, & Labellum.
Overall size:- L. 64 mm. x W. 34 mm.



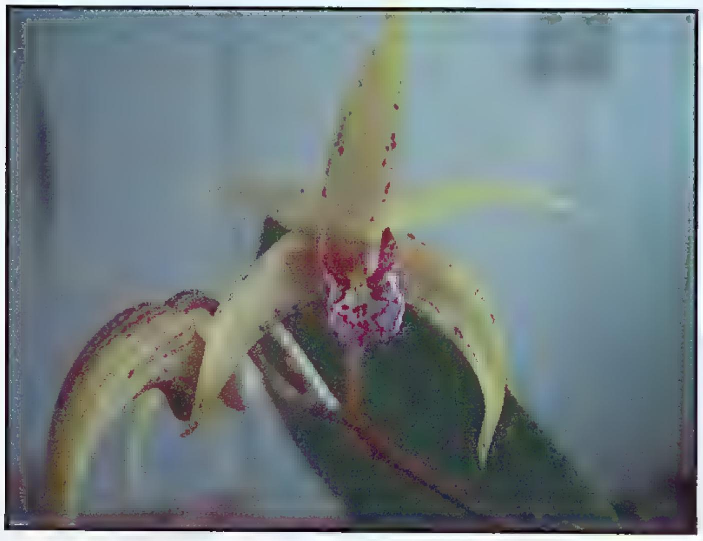
D. Aussie Victory 'Blush Tips' x
speciosum var. *curvicaule* 'Daylight Moon' FCC-AOC/NSW.

Size of flower:- L. 61 mm. x W. 32 mm.
Base Colour: Yellow – Cream. With Red Maroon blotching on the edging of segments.
Labellum: White background, with heavy blotching in Red – Maroon.



D. Peewee 'Keith'. x *D.* Yondi Tina 'Goliath'.

Size of flower:-
Length: L. 72 mm. x W. 54 mm.
Colour:- Overlaid : Base – Yellow / Cream with fine spotting on segments,
Labellum: Base – White, with faint striping,
Column: Heavy Red – Maroon.



D. Jesmond Dazzler.

Size of Flower:
L. 48 mm. x W. 35 mm.
Colour:- Base – Yellow / Cream with fine spotting on segments.
Labellum: White background –
Spotting & blotching – Red – Maroon.

P.S. I omitted to state the history of *Den.* Hilda Poxon.

Den. Hilda Poxon. Is a primary hybrid,
= *Den. speciosum* x *tetragonum.*

Named by Dr. Noel Grundon, a past resident of Toowoomba.

Mrs. Poxon was a foundation member of the Native Orchid Society of Toowoomba Inc. And was an energetic worker over many years.

Athol Rosenberg.
Email. **athnan@iprimus.com.au**

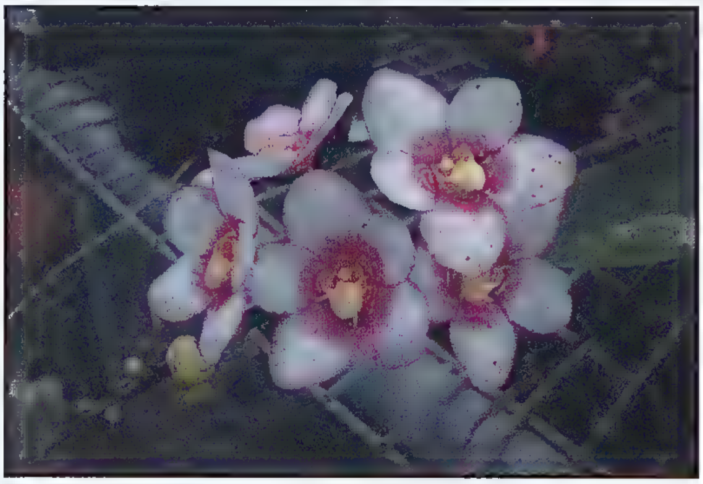
Hybrids at the 11th Kempsey Speciosum Spectacular (Sept 2012)

Phil Ritchie

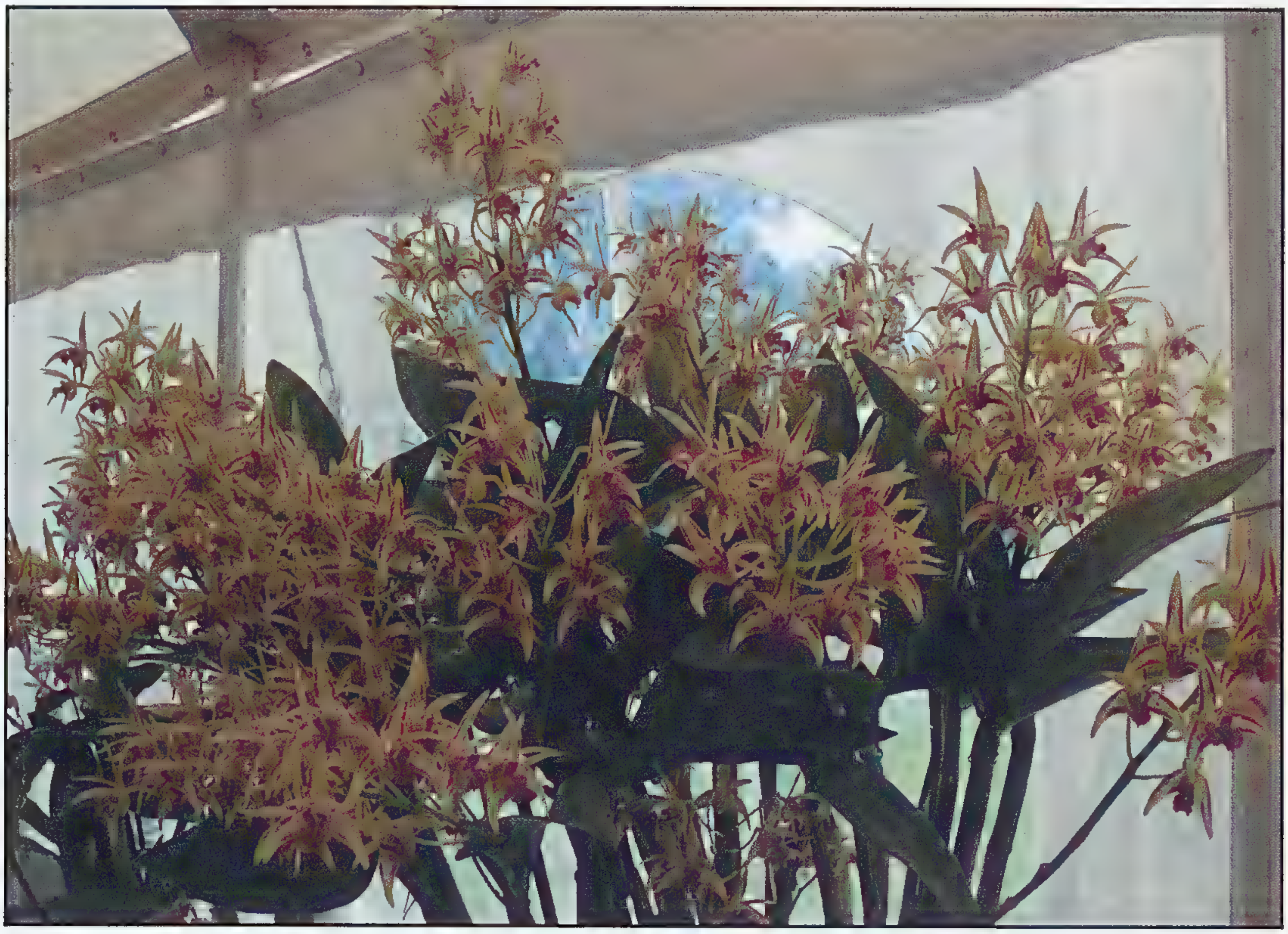
As in past years, the display of hybrids at the Kempsey Show was first class. While there were some terrestrial hybrids on display, most were *Dendrobium* hybrids with a few *Sarcochilus* hybrids thrown in.

Many of these plants were of specimen size which made for a most striking display. Interestingly this year, there were examples of hybrids from the main *Dendrobium* sections we are familiar with namely: *Dendrocoryne*, *Rhizobium*, *Latourea* (two examples – PNG hybrids), and *Spatulata* (not a hybrid in this case – a line bred species example). Finally, some hot/colds were also benched.

The champion hybrid was awarded to Fred Fear's plant *D.* Engagement (*D. engae* X *D. shiraishii)* (section *Latourea*) and the reserve champion to Brian Gerhard's plant *D.* Lauren 'Holly Chief' (section Rhizobium). Some images of plants benched are shown here.

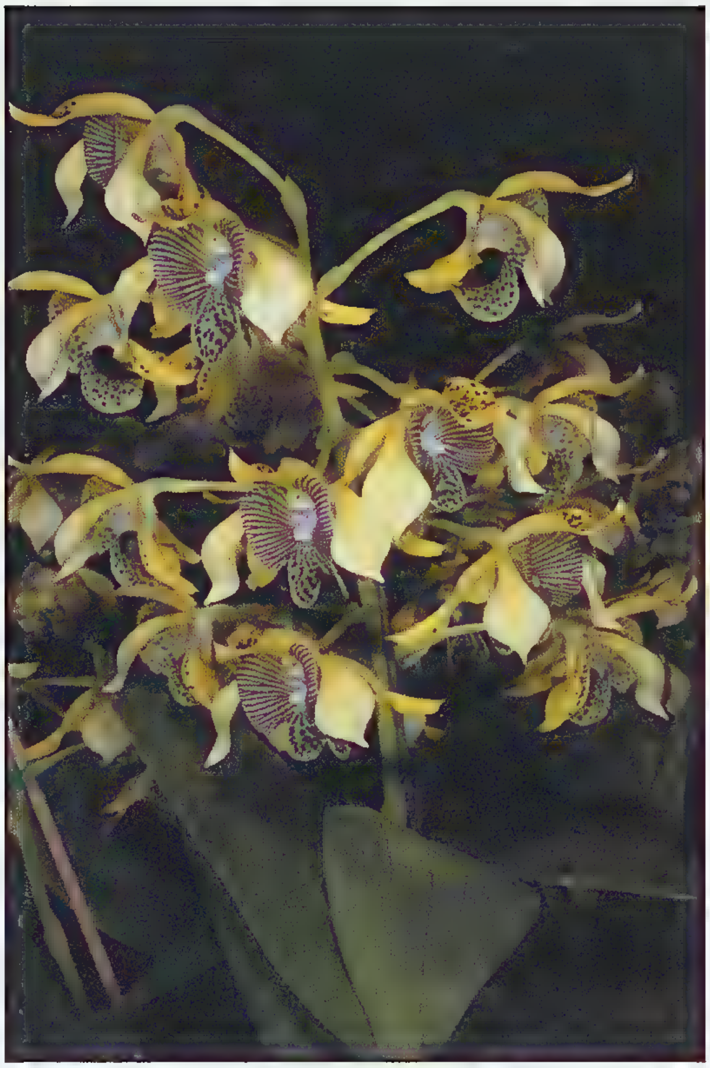


Sarcochilus Norma 'Kalaru' (best *Sarcochilus hybrid,* Lloyd Edwards)

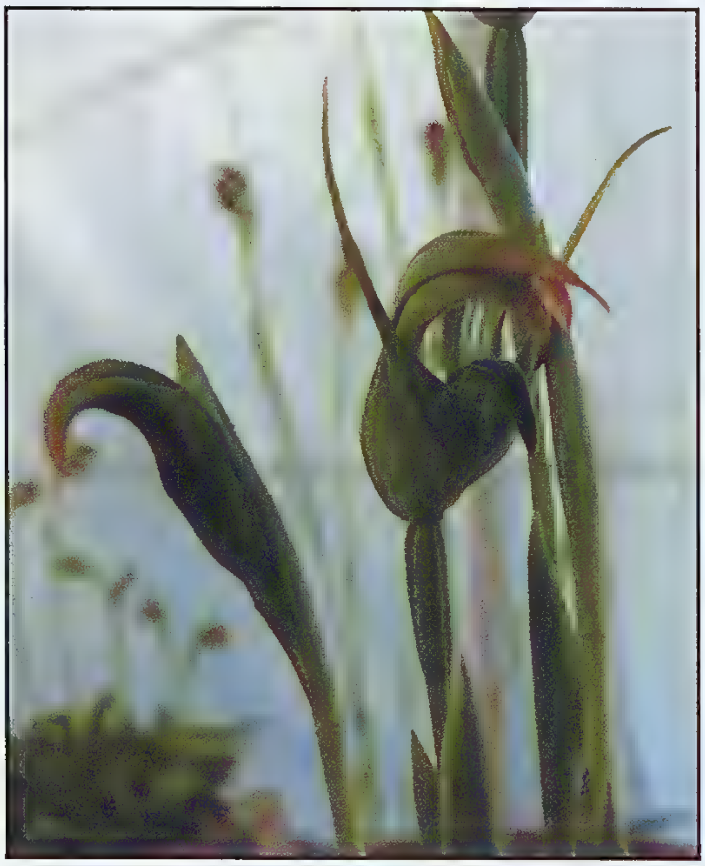


D. Jesmond Star 'Melissa' (section *Dendrocoryne*)

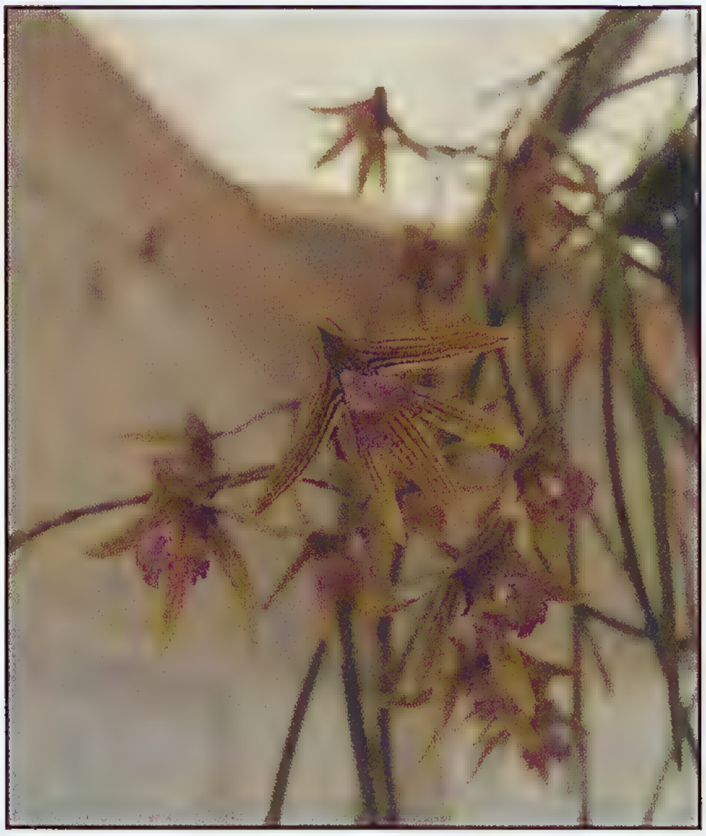
Fred Fear receiving the Champion Hybrid Ribbon from Phil Richie at the show dinner
Photo Bill Dobson



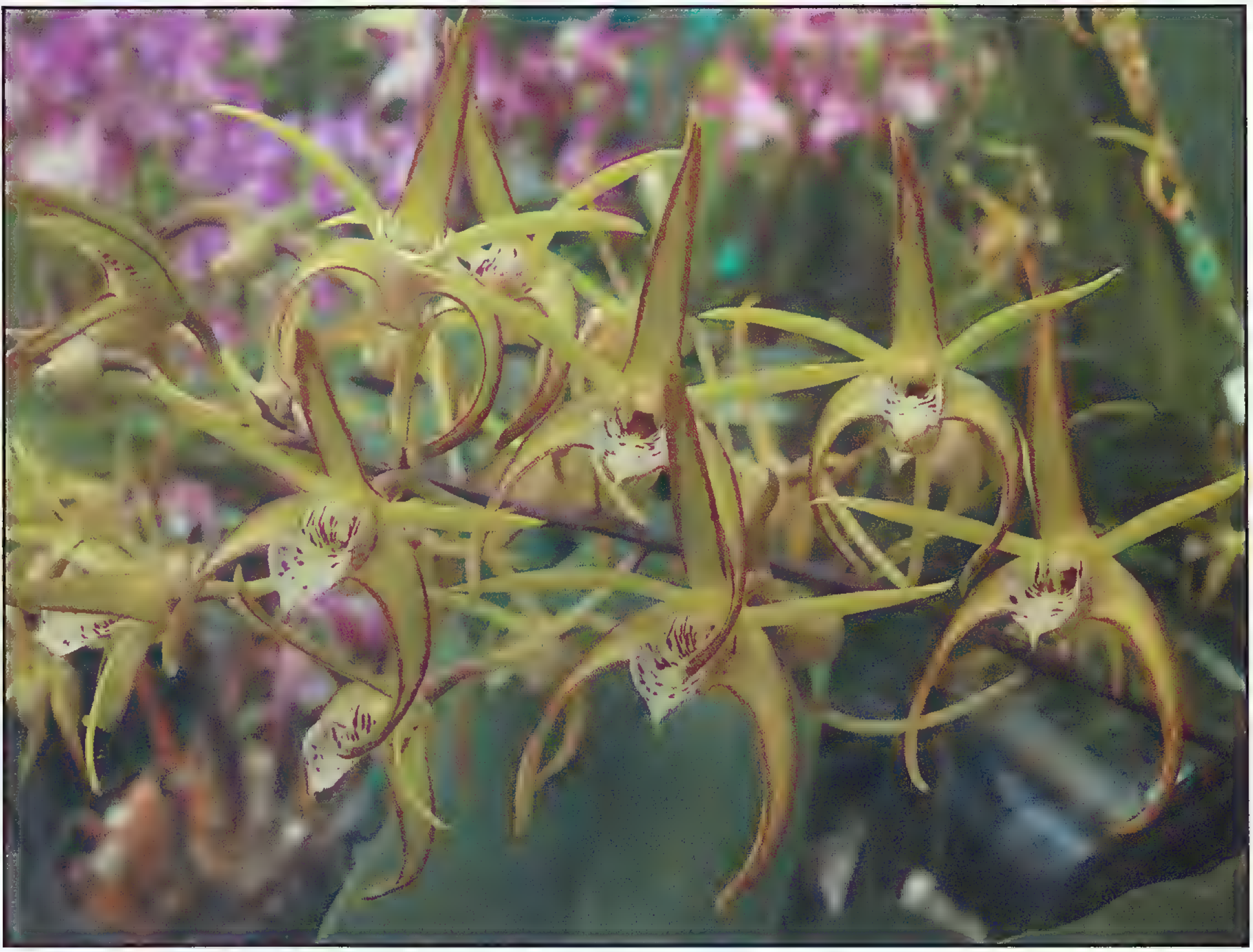
D. Engagement 'Margaret' AM/ACC-ANOS HCC/ACM AOC/NSW Champion Hybrid (section Latourea)
Photo Bill Dobson



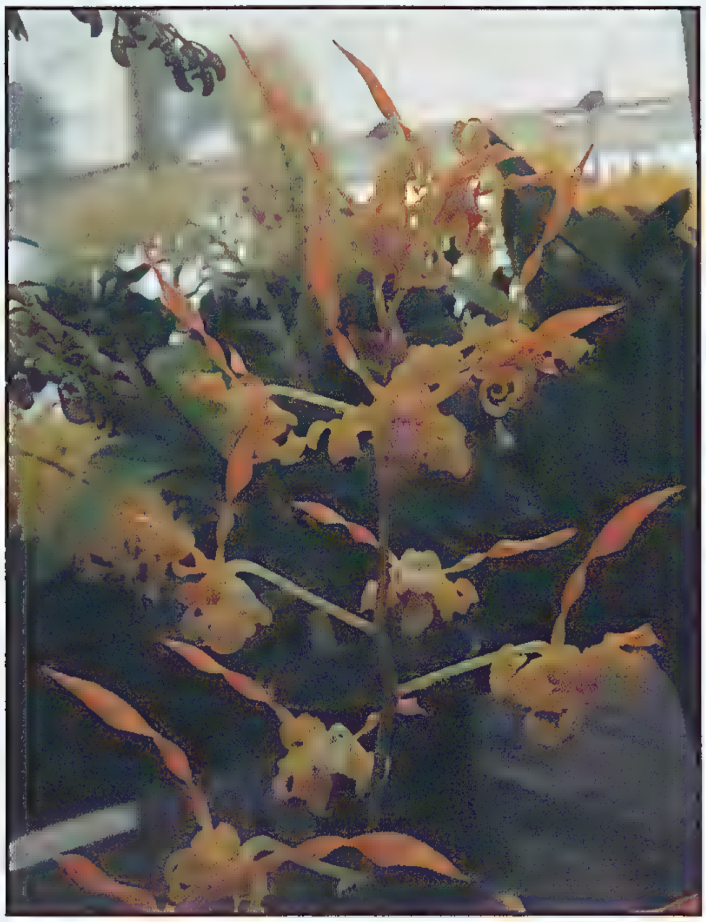
Pterostylis furcata X *Pterostylis ingens*
Photo Phil Richie



D. Tweetas 'Albies Gift' (section *Rhizobium*)
Photo Phil Richie



D. Hilda Poxon (section *Dendrocoryne*) Photo Phil Richie



D. tangerinum 'Kuranda'(a very good line bred example of this species – Section Spatulata, ex PNG) Photo Ian Chalmers

Den. speciosum taken on Sunday Walk Photo Ian Chalmers

ACCIDENTS CAN HAPPEN
(But some things are not accidental)

Have you ever gone out for the day to look for something and find something else? Of course you have or you would not be involved with native orchids.

This happened in early February when my frequent orchid hunting companion and long-term bird aficionado (Denis Wilson), accompanied me to the site of *Corunastylis superba* to check what plants had emerged in 2012. The short answer is that no plants on the only site in my district, managed to produce a flower. This site is about one hour's drive from Nowra and the light rain which constantly fell made searching among the low heath unpleasant, however wet clothes and feet are problems occasionally encountered.

After a brief search for any other species which might have been around we only managed to find a lone plant of *Diplodium reflexum* and a few *Corunastylis* species. Closer to home Denis noted some parrots perched on the power lines and asked me to stop. After parking off the road we walked up and down through the wet verge trying to photograph the parrots in the drizzle against the dark haze and low cloud the parrots were identified as Neophema pulchella (Turquoise Parrots), a species listed as Vulnerable under the NSW *Threatened Species Conservation Act 1995* (TSC Act). We later learned this parrot has been recorded in this area but is considered locally rare.

A total of 21 birds were counted although approximately another 25 were seen a reliable count was not possible. I left Denis with the car to photograph the parrots and as they are regularly ground feeders more walking was required, unfortunately no more birds were seen but on the walk back to the car we began to see orchids. *Corunastylis fimbriata* was the first followed by *Corun. woollsii*, which should not have been a surprise as it is the most common local species in this genus. *Corun. apostasioides* was also seen along with several plants of *Cryptostylis erecta*.

At this point I should mention the roadside verge containing the orchids is the site of the Eastern Gas Pipeline and underground Telstra cables. The pipeline went through this area almost 15 years ago and was an environmental disaster, as no notice was taken of any endangered species and no recriminations resulted from their known destruction. I regularly drive along this road and the spring of 2011 was the first time I have seen any orchid species in flower along the pipeline route. That species was *Diuris sulphurea*, a very common local species; however I was very pleased to see the *Corunastylis* as I consider them to be a little more particular about their preferred habitat.

After finding the previous species I was keen to see what else had emerged and I could not believe my luck as I managed to find six plants of *Genoplesium baueri*, a species with which I have been concerned for 11 years and I am currently waiting on the determination of the NSW Scientific Committee for my nomination to have the species listed as Critically Endangered. No more plants were found but six at more were added to the meagre total, considered to be 210 (now 216). But wait, there is more to tell and not all of it is good.

As the day was late Denis returned home but rang again a day later after he had downloaded his photos to say he was not happy with them, mostly due to the poor background of the afternoon sky and could another trip be arranged if the weather improved. On Saturday morning this happened and more photos were taken of the birds but during this time the plants of *G. baueri* were located.

Not content with this, a decision was made for another visit the next day (Sunday) and the spare bed was occupied so an early start could be made. With a clear day and 30° C temperature, better photos were taken but no more orchids were uncovered. When this effort was over we decided to check the flowering possibilities at a site in Nowra which is threatened with destruction by a road. Along the line of the proposed road are three plants of *G. baueri* recorded during my preparations for a Critically Endangered nomination in 2010.

These three plants are easily found, by those who know what they are looking for. I was more than surprised to see the site had been disturbed by what obviously was not a natural event. The surface 20 mm had been removed by what I believe was manual means, using a spade or similar instrument. The chances of this being an accidental event would equal the odds of winning Lotto. No other disturbance of any type was evident and upon checking another site away from the road alignment, no damage had occurred. To me this was targeted damage and a quick assessment of possible culprits came to the conclusion that the only beneficiary would be a person or persons with a preference for the road to be constructed along this alignment. It is my opinion that this damage could only have been perpetrated by a person/s with direct access to the submission I wrote to have *G. baueri* listed. I therefore discount the NSW Scientific Committee but others who have this species on land under their control are those to whom the finger of suspicion must be pointed.

Photos were taken and a visit was made to the NPWS Office the next day to report the damage and record the location of the Turquoise Parrots and *G. baueri*. This news was tempered by a response which indicated that area of road verge was to be mowed over the coming weeks. While mowing itself would not damage the orchids, the large machinery could make an impact in two ways. Firstly, the weight of the machinery will make indentations in the ground and secondly by compaction of the soil, however the body responsible for the mowing will be contacted to delay mowing until the orchids have set seed if this is a possibility. I say only a possibility, as *G. baueri* is self-pollinating and only a few plants perform this function each year.

A call to NPWS and the mowing problem was solved. A few days later I met the NPWS officer and the mowing contractor, who requested I mark all plant locations and his team would use hand machinery around each area. This was done and during the marking exercise a further five plants were found, giving a total of 11 extra *G. baueri.* A check of the area a few days later was very pleasing, as all plants had been protected as promised and a thank you email was sent to the parties concerned.

These roadside plants have now been recorded with the mowing contractor via GPS locations and have been placed on their permanent log. Hopefully this will negate any human failure to pass this information via the simple but far from failsafe method of verbal communication.

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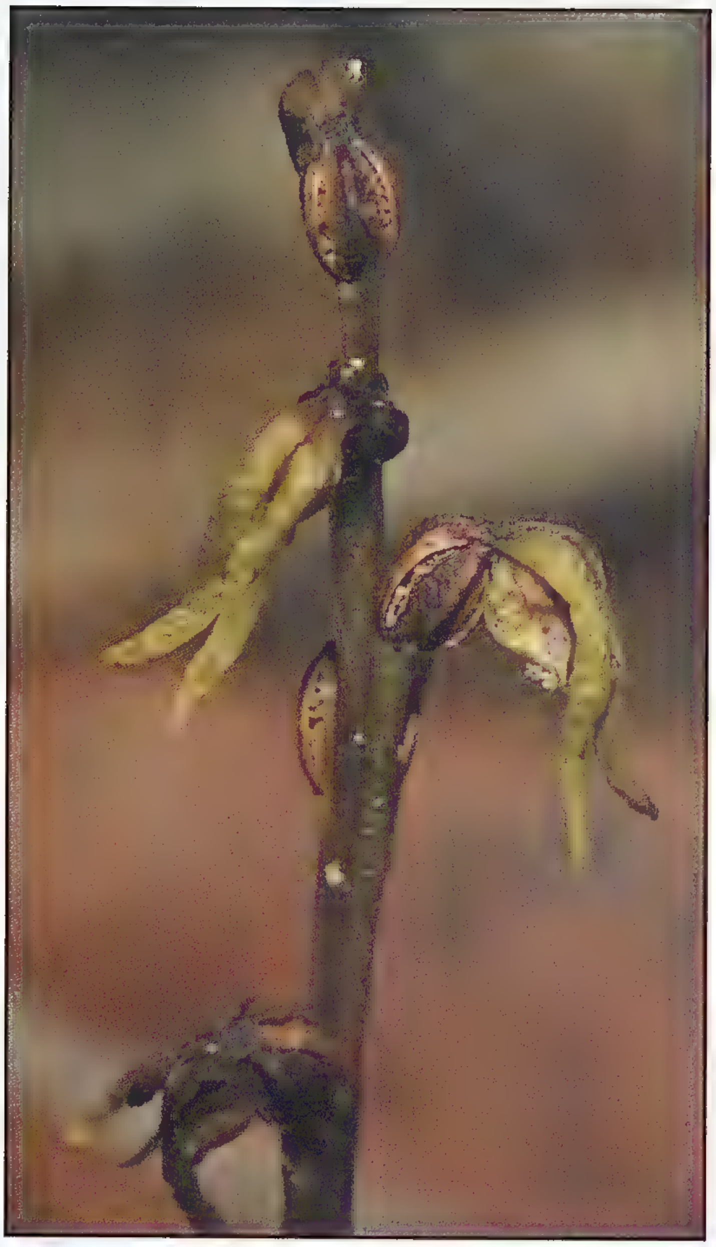
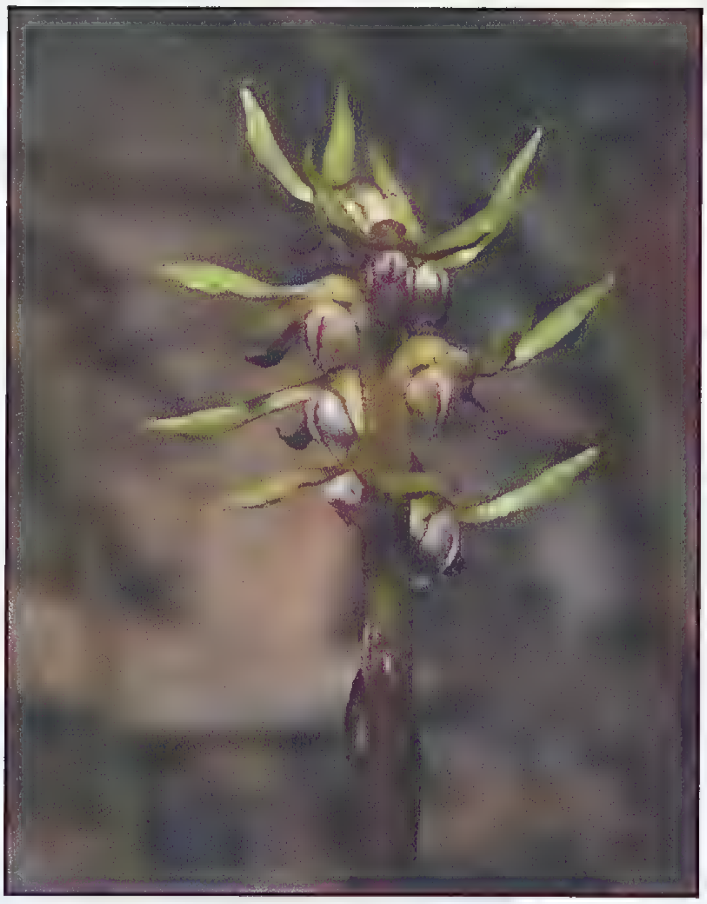


G. *baueri* 1 with capsules Bom Ck



G. *baueri* Bom Ck

G. *baueri* site damage 3 Bom Ck

G. *baueri* site damage 4 Bom Ck

G. *baueri* site damage 6 Bom Ck

RHS Registrations of Australian Hybrids May-August 2012

Dendrobium

Australia Cutie	Burgundy Bride x Yondi Tina	M.Pham (W.Turville) 2012
Binh-Ba	Memoria Alicia x Aussie Victory	Down Under N.O. 2012
Brimbank Metal Red	Regal Hilda x *speciosum*	M.Drobski 2012
Brimbank Uluru	Redman x Aussie Parade	M.Drobski 2012
Copperhead Road	Intense x *speciosum*	L.A.Edwards 2012
Crazy Diamond	Glenn Star x *speciosum*	L.A.Edwards 2012
Darlington	Warringah x Aussie Ira	H.A.Wilson 2012
HIghway Star	Rutherford Starburst x *tetragonum*	L.A.Edwards 2012
Jean Genie	Maddie x Barb	L.A.Edwards 2012
Layla	Hilda Poxon x Catherine Hill	L.A.Edwards 2012
Little Wing	Da-Nang x Red River	L.A.Edwards 2012
Mem. Ester Svensson	*lithocola* x Top Hat	P.Larsson 2012
Pink Halo	King Leaney x Kim	J.Woolf (O/U) 2012
Toowoomba Sunrise	Hannah Lucille x *speciosum*	Woolf Orchid Culture
Toowoomba Sunset	Elegant Heart x Darlington King	J.Woolf 2012
Toowoomba Topaz	Topaz Dream x *johannis*	J.Woolf 2012
Vista Awesome	Cheryl's Glory x June Mac	M.Pham (F.Clarke) 2012
WOC Elegant River	Elegant Heart x Red River	J.Woolf 2012
WOC Gold Bullion	Eureka x Clarrie Wuth	J.Woolf 2012
WOC Purple Brilliance	Peewee x Pink Halo	J.Woolf 2012
WOC Purple Glow	Elegant Heart x Pinterry	J.Woolf 2012
WOC Regal Angel	Class x Splash Betty	J.Woolf 2012
Yileen Patan	Wow x Tania's Pride	Hanging Garden 2012

Dendrobium [Dockrillia]

Anthedon	*nugentii* x *racemosum*	G.Dimos 2012
Anthedon Ladies	*racemosum* x *schoeninum*	G.Dimos 2012
Jack Tinson	Oliver Jack x *striolatum [striolata*]	Down Under N.O.
Anthedon Splendour	*dolichophyllum* x *teretifolium*	G.Dimos 2012
New Age	*teretifolium* x *fairfaxii*	Douglas Lee 2012
Vicki Elizabeth	*fairfaxii* x *schoeninum*	Douglas Lee 2012
Wadjullah	*bowmannii* x *teretifolium*	Douglas Lee 2012

Sarcochilus

Carew's Fields	Burgundy on Ice x Velvet	G.Abell (D.F.Butler) 2012
Gloaming	New Dawn x Fizzy Dove	T.Connelly 2012
Mary Larkin	Roberta x Snowhart	Botanic Ridge Orch. (B.Larkin) 2012
Mem. Bill Mucklestone	Aussie Dawn x Tin Yin Lara	G.Abell (D.F.Butler) 2012
Mem. Dennis Wood	Dove x Judith	N.Roper (D.Wood) 2012
Memoria Ida Abell	Fizzy Dove x Tin Yin Lara	G.Abell (D.F.Butler) 2012
Walnut Valley Sweetheart	Kirra-Lea x Heidi	B.Rinke (O/U) 2012
Western's Surprise	*spathulatus* x *weinthalii*	Western Orch. (K.Kopicki) 2012

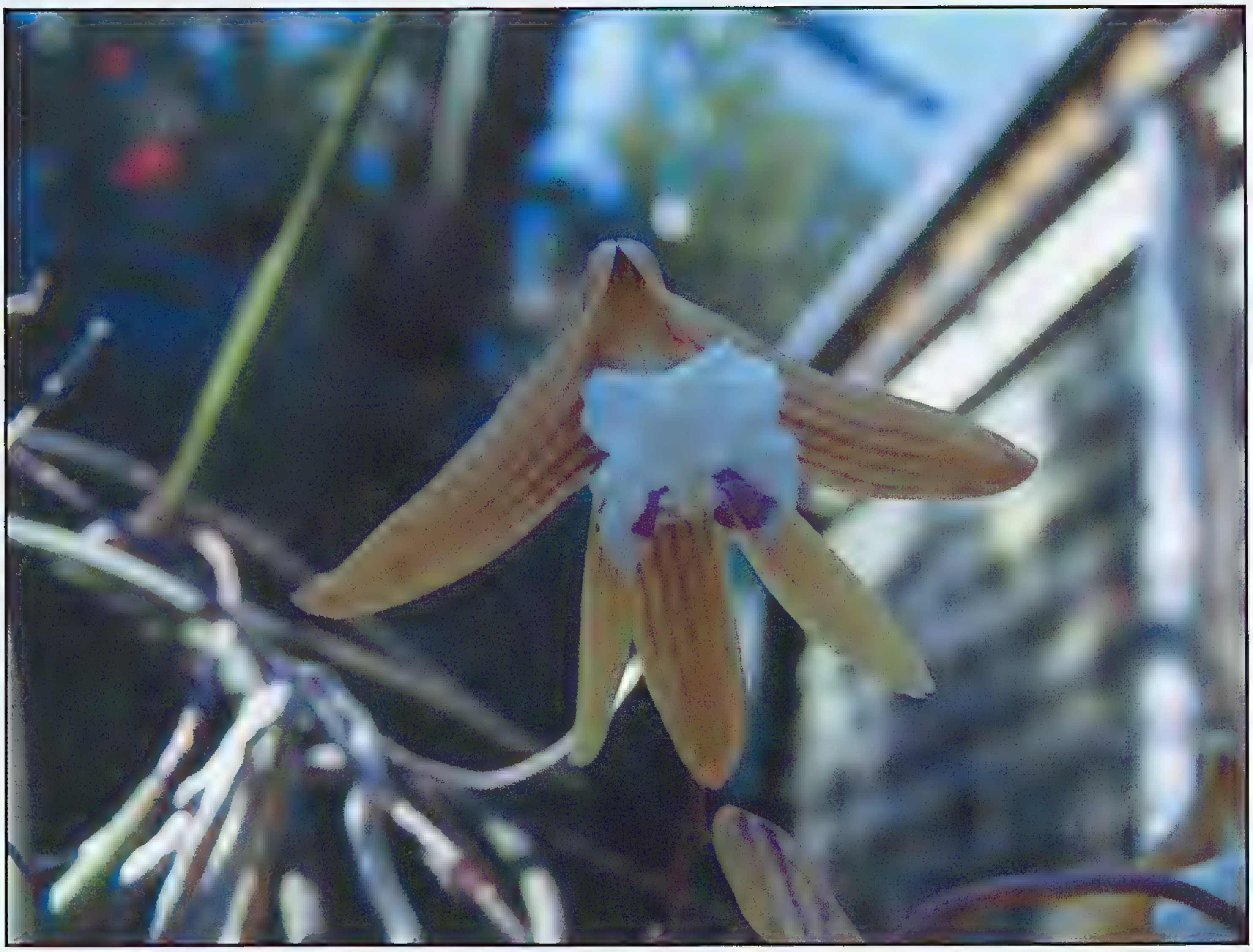
RHS Registrations of Australasian Hybrids May-August 2012

Dendrobium [includes *Dockrillia*]

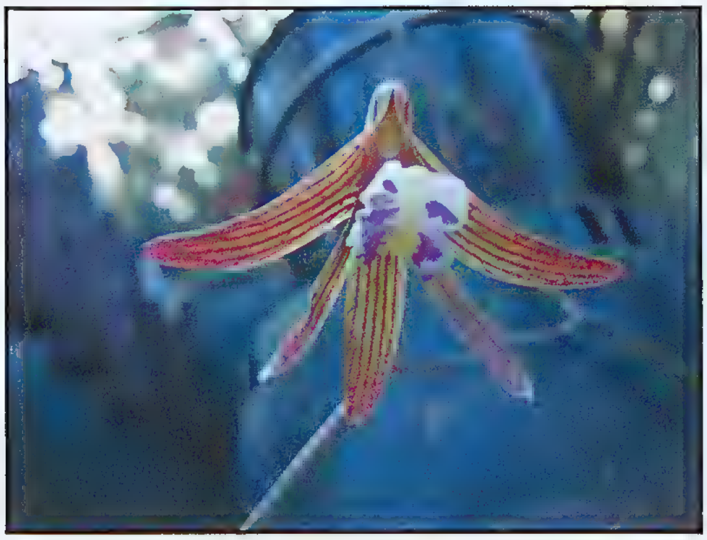
Amphion Charm	Jake Noah x Grumpy	G.Dimos 2012
Amphion Dream	*fuliginosum [fuliginosa]* x Grumpy	G.Dimos 2012
Amphion Falls	Anthedon x Australian Sunblessed	G.Dimos 2012
Amphion Glory	Olga Wenck x Grumpy	G.Dimos 2012
Amphion Glow	Dorn's Bill x *teretifolium*	G.Dimos 2012
Aussie Hot Lips	Tweetie x *mortii*	G.Dimos (P.Spence) 2012
Benjamin Bernard Seng	Rose Marie x Hawaii	Koh Keng Hoe 2012
Bundy Blue	Kuranda Blue x *cochliodes*	J.W.Hughes (B.Coleman) 2012
Cenchrias	Australian Freckles x *fairfaxii*	G.Dimos 2012
Chocolate Horns	gouldii x Jiwani Chrome	Mrs.J.Lowry (G.Priebe) 2012
Engagement	*engae* x *shiraishii*	F.T.Fear (P.Spence) 2012
Eva Louise	Green Gem x Tweetie	Douglas Lee 2012
Frances Byrne-Dimos	Phil's Delight x Aussie Hot Lips	G.Dimos 2012
Grumpy Doll	Grumpy x *dolichophyllum*	G.Dimos 2012
Grumpy Ladies	Grumpy x *schoeninum*	G.Dimos (Douglas Lee) 2012
Hot and Grumpy	Grumpy x Aussie Hot Lips	G.Dimos 2012
Jeannette Byrne-Dimos	Martin x Aussie Hot Lips	G.Dimos 2012
Jiwani Chrome	*helix* x *lineale*	Mrs.J.Lowry (O/U) 2012
Kaede	*helix* x *discolor*	Masamichi Fukuda 2012
Kazam	*discolor* x Tosons	J.Bryson (O/U) 2012
Kuranda Fair	Mayfair x *lasianthera*	Coleman's 2012
Kuranda Giant	Caesar x *stratiotes*	Coleman's 2012
Kuranda Mac	Debbie McFarlane x Franky Sie	Coleman's 2012
Kuranda Maid	Cherub x Kuranda Blue	Coleman's 2012
Kuranda Purple	Peter Petersen x Floral Labis	Coleman's 2012
Lorraine's Choice	Blue Sparkle x carronii	Coleman's 2012
Maria Nancy	Duffy x Australian Ginger	S.Harper (M.Denning) 2012
Meen Moon Rabbitt	*calophyllum* x *tangerinum*	Meen Nursery 2012
Memoria Jean Deas	*fuliginosum* x *calamiforme*	G.Dimos 2012
Phil's Delight	Aussie Phil x *dolichophyllum*	G.Dimos (P.Spence) 2012
Purple Spiral	Kuranda Purple x Fraser's Bluefair Spiral	Coleman's 2012
Samuel Noah	Tweetas x Grumpy	G.Dimos 2012
Seeto	*bigibbum* x *stratiotes*	Thongsomboonranathon 2012
Sparklet	Blue Sparkle x Kuranda Blue	Coleman's 2012
Super Twist	Miltoft x *lasianthera*	Coleman's (Cairns Orch.) 2012
Zoe Byrne-Dimos	*racemosum* [*racemosa*] x Tweetie	G.Dimos 2012

Examples of some of the new Dendrobium [Dockrillia] breeding.

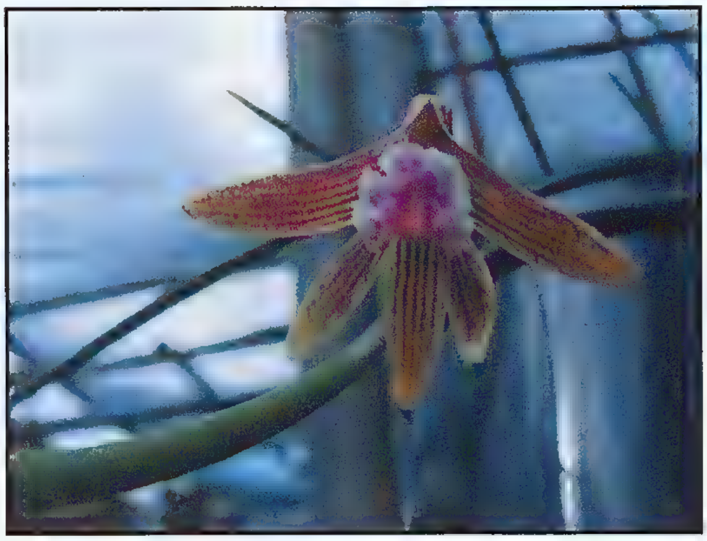
The registration of hybrid Dockrillias by S Harper were published in the June Orchadian the photographs were taken by S Harper



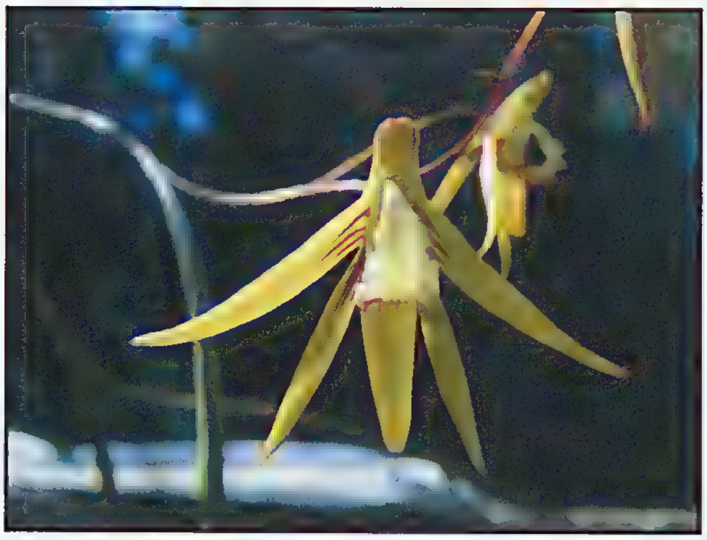
Dockrillia Waverley Flare - (*D. striolata* x *D.* Grumpy)



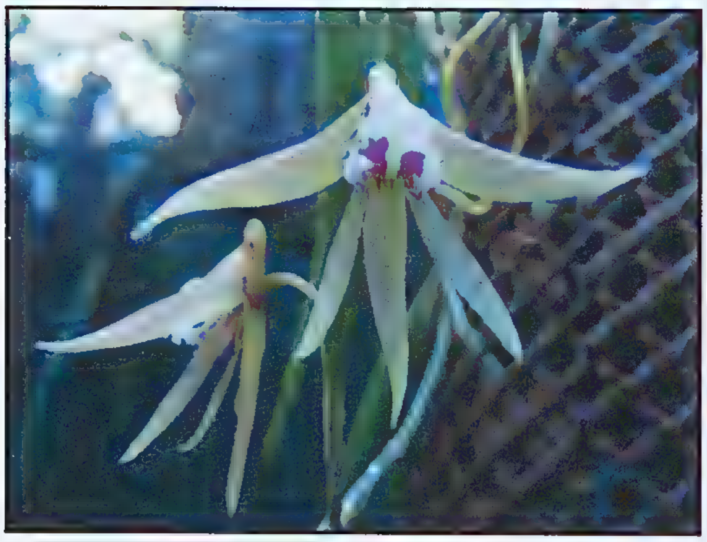
Dockrillia Waverley Gem -
(*D.* Grumpy x *D. mortii*)



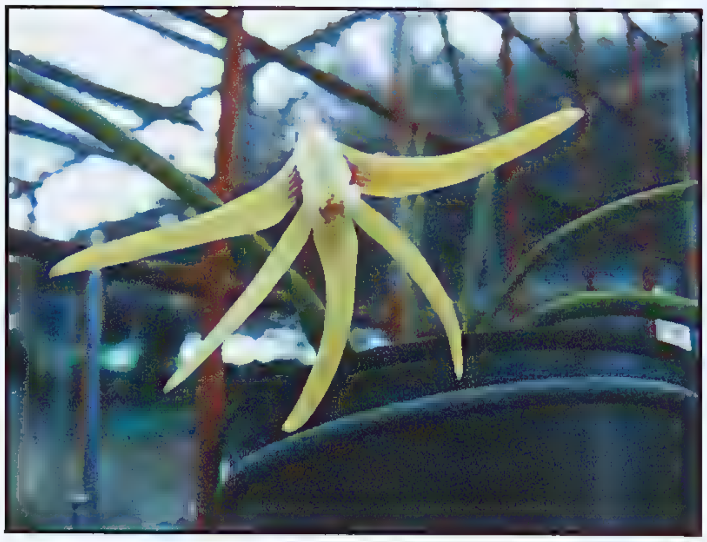
Dockrillia Waverley Glow -
(*D.* Aussie Phil x
D. Australian Luscious Lip)



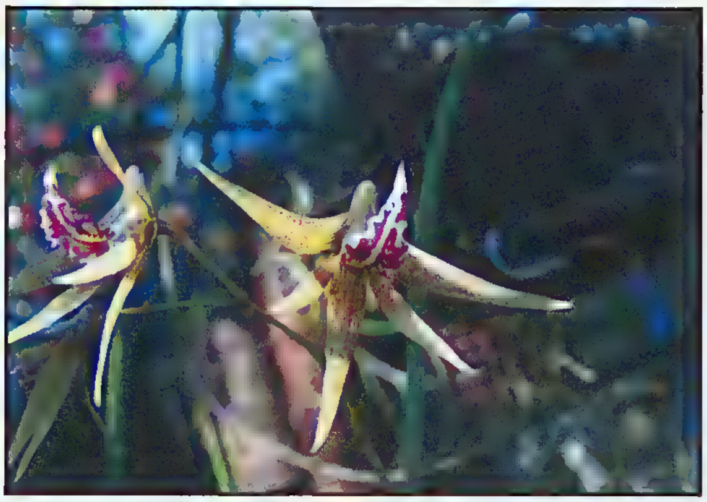
Dockrillia Waverley Jewel -
(*D.* Saboteur x *D. striolata*)



Dockrillia Waverley Mist -
(*D.* Martin x *D.* Fiona Louise)



Dockrillia Waverley Sunshine - (D. dolichophylla x D. Amythaon)



Dockrillia Waverley Magic -
(*D.* Saboteur x *D.* Australian Sunblessed)

Dendrobium teretifolium

Leaving aside the discussion on *Docrillia* vs *Dendrobium* there is a debate to be had about *D. teretifolium* that parallels the debate on D. speciosum. The new registrations listed earlier include as parents *Dockrillia fairfaxii*, *D. dolichophyllum*

The World Checklist, lists *Dendrobium teretifolium* var. *aureum* as the "accepted name" for *Dockrillia dolichophyllum*.

This means that in some societies it will be acceptable to bench the plant as the hybrid *Dendrobium* Anthedon Splendour while at another society it would required to be exhibited as *Dendrobium teretifolium* or *Dockrillia teretifolia*.

The same applies to Dendrobium New Age *D. teretifolium* x *fairfaxii, D. fairfaxii is a synonym of D. teretifolium.*

On the same theme *D.* Vicki Elizabeth which is *D. fairfaxii* x *D. schoeninum* is a synonym of *D.* Jiggi which is *D. teretifolium x D. schoeninum*.

There are many other examples of this that should be debated.
The use of *D. fulginosum* as *D. teretifolium* adds to the confusion.

Ian Chalmers

New Species of Papuan *Agrostophyllum* Part 4

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ABSTRACT: Five new species and one new subspecies of Papuan *Agrostophyllum* are described and illustrated. The new taxa are *A. carrianum, A. grubbianum* ssp. *kaironkense, A. huonense, A. longinode, A. reeveanum* and *A. woitapense.*

Key Words: New Guinea, *Agrostophyllum,* new species.

This paper continues on from the third part and herein describes five new species and one new subspecies. This brings the number of species known from New Guinea to about 66 but at least another eight Papuan *Agrostophyllum* require description.

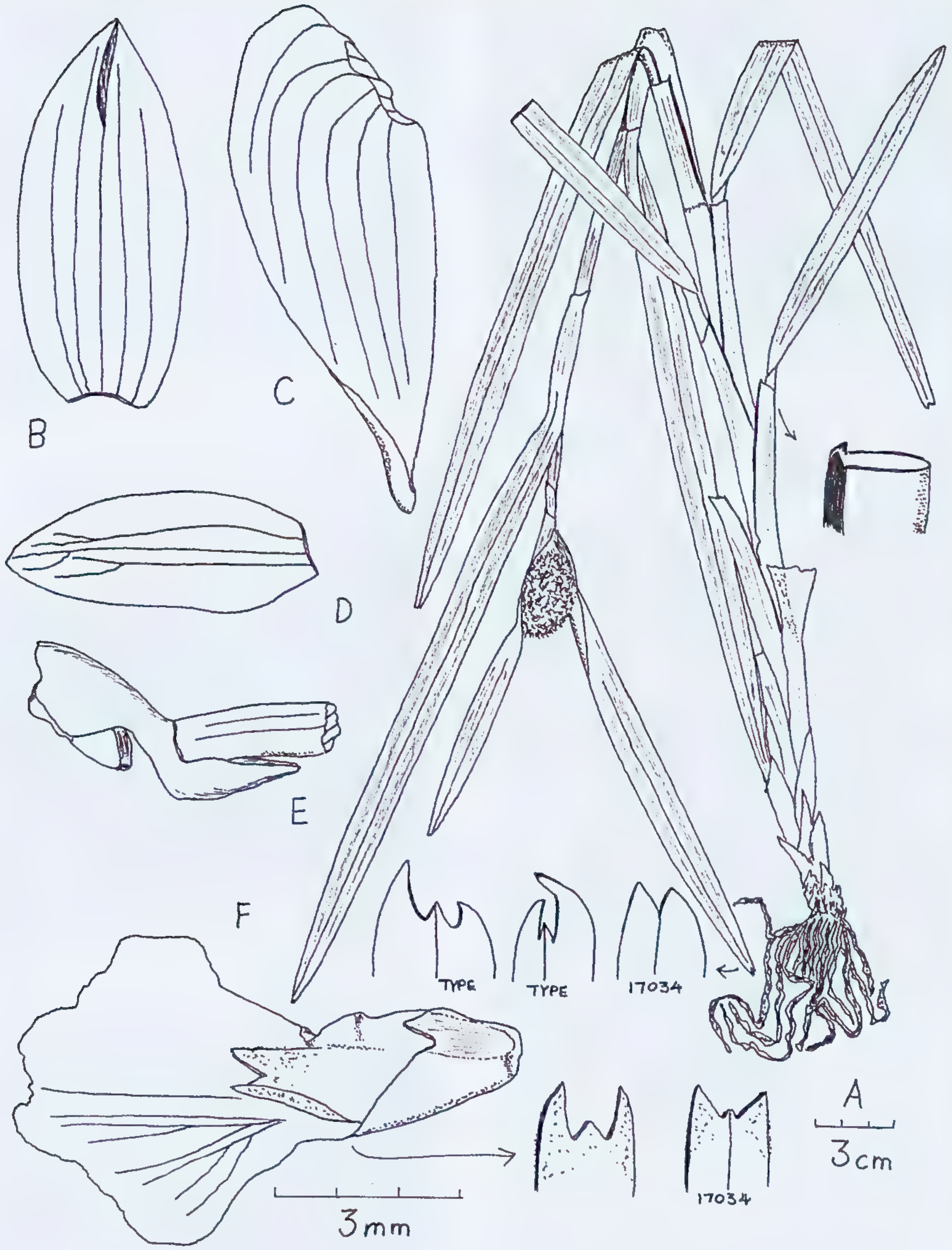
Recently (Ormerod 2011) I published the view that *A. leucocephalum* Schltr. and *A. graminifolium* Schltr. are conspecific based on an examination of isotypes of these taxa in AMES. During a recent visit to AMES I found two unrecorded isotypes of *A. leucocephalum* that matches Schlechter's concept of this taxon. In summary *A. leucocephalum* Schltr. is a rarely collected taxon, two isotypes accredited to it at AMES (i.e. images on microfiche and online) carry material referrable to *A. graminifolium*, whilst another two unrecorded isotypes represent the true species. On the other hand *A. graminifolium* Schltr. is a good species and the most commonly collected montane species in New Guinea.

Agrostophyllum carrianum Ormerod, *sp. nov.*

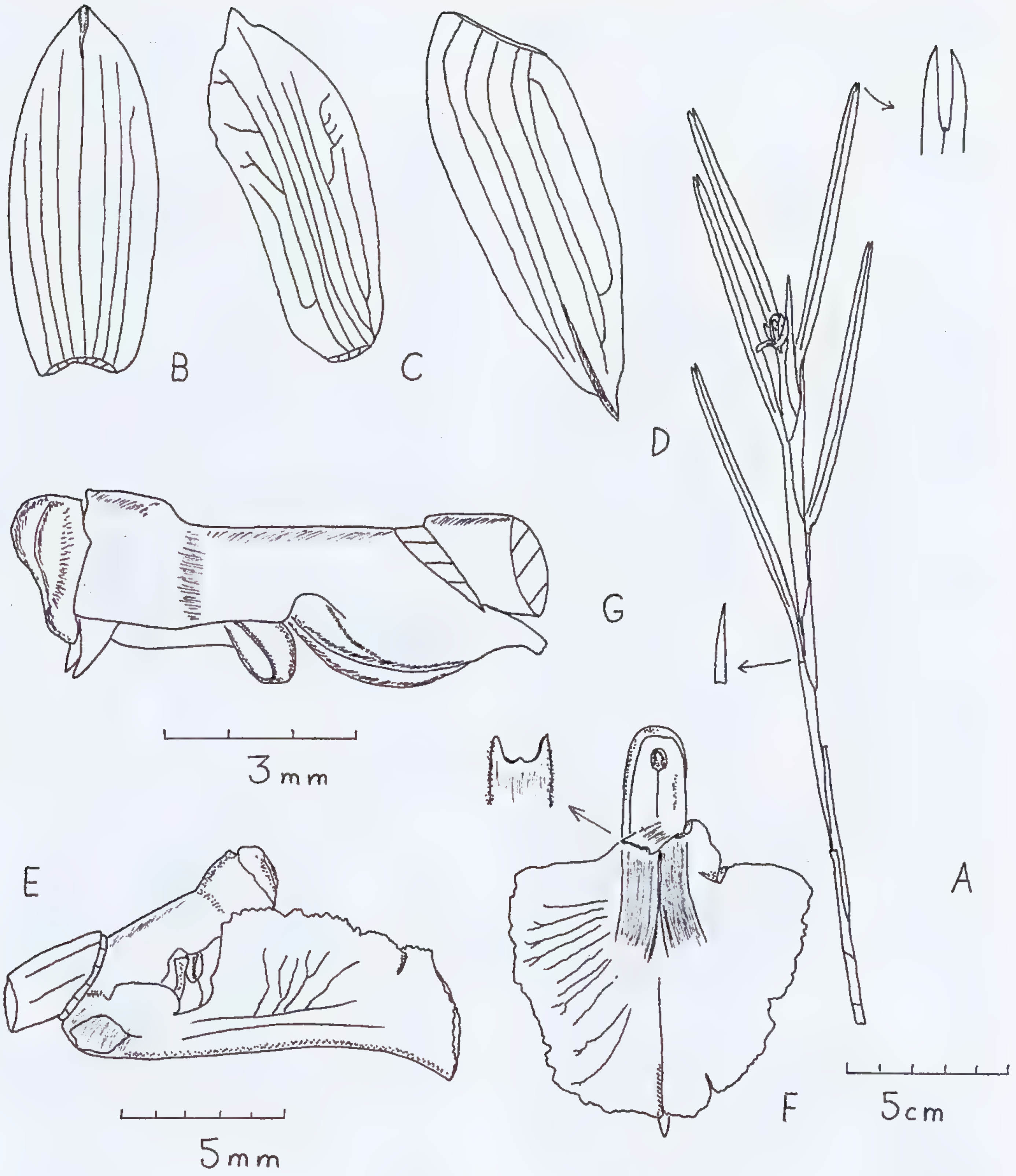
Type: Papua New Guinea, Central Prov., Kokoda, 13 May 1936, *C.E. Carr 17213* (Holotype: BM!; Isotype: L!).

Affinis A. daymanense Ormerod *sed lobis lateralibus obliquis (non rotundo-truncatis) et columna subgracilibus (non crassioribus) differt.*

Epiphytic? herb. Roots terete, fleshy, pubescent, to 2 mm thick. Stems caespitose, complanate, laxly 8-9 leaved, mostly covered by leaf sheaths, but up to 6.7 cm of upper internodes exposed, 49.5-53.0 cm long, 0.5-0.6 cm wide. Leaves linear-ligulate, apex bidentate to tridentate, thinly coriaceous, 6-35 cm long, 0.75-1.30 cm wide; leaf sheaths black margined, exposed part to 9.5 cm long, 0.75-0.95 cm wide laterally; stipules deltate, acute, to 1 mm wide. Inflorescence terminal, globose, composed of numerous bracts, sheaths and flowers, 2.0-2.2 cm long and wide. Pedicellate ovary clavate, 6 ribbed, ca. 5.2 mm long. Flower colour unknown. Dorsal sepal elliptic, acute, carinate in apical third, 5 veined, 5.7 mm long, 2.8 mm wide. Lateral sepals obliquely ovate-lanceolate, subacute, thickly carinate in upper half, 6 veined, 7.3 mm long basally (6.3 mm long medially), 3 mm wide. Petals narrowly elliptic, subacute, 3 veined, 4.9-5.7 mm long, 1.9-2.1 mm wide. Labellum trilobed, 7.3-7.5 mm long; hypochile retrorse saccate, sidelobes obliquely truncate, ca. 3 mm long, 1 mm wide laterally, sac ca. 1 mm long; ligula subquadrate, bidentate to tridentate, minutely papillose-pubescent,; epichile trilobulate, trapeziform, base with 2 narrowly oblong calli, apex bilobulate-emarginate, 4.2-5.2 mm long, 4.2-5.0 mm wide, midlobule ca.1 mm long, 2.2 mm wide. Column obliquely erect, 2.9 mm long (2.15 mm long minus anther cap).



Agrostophyllum carrianum – A. plant; B. dorsal sepal; C. lateral sepal; D. petal; E. column; F. labellum. A and B-F to respective scales. A, one leaf tip and one ligula from Carr 17034, rest from holotype.



Agrostophyllum grubbianum Ormerod subsp. kaironkense – A. stem; B. dorsal sepal; C. petal; D. lateral sepal; E. flower minus tepals; F. labellum; G. column. A, B-F and G to respective scales. Drawn from holotype.

Distribution: Papua New Guinea.
Specimen examined: Papua New Guinea, Central Prov., Isuarava, 7 March 1936, *C.E. Carr 17034* (BM).

Etymology: Named after the orchidologist Cedric Errol Carr (1892-1936), collector of the type.

This species is very similar to *A. daymanense* Ormerod in habit and labellum shape but it differs in the hypochile having oblique (not rounded-truncate) sidelobes, also the column is much more slender with a retrorse (not perpendicular) substigmatic appendage.

Agrostophyllum grubbianum Ormerod subsp. ***kaironkense*** Ormerod, *ssp. nov.*

Type: Papua New Guinea, Madang Prov., Schrader Range, Kaironk Valley, above Wayak Hamlet, 1900 m, 6 November 1993, *R.O. Gardner 7273* (Holotype: L!; Isotype: AK).

A subspecies typica caulibus longioribus (25-34 vs. 17-20 cm), foliis longioribus (5.6-9.0 vs. 4.0-5.7 cm) et epichilo labello ovato-trullatis (non rhombicis) differt.

Epiphytic herb. Roots terete, growing back along rhizome and stem remnants, 1.5 mm thick. Stem semiterete basally, compressed above, laxly 6-8 leaved, forming fascicles of 3 at apex of rhizome, 25-34 cm long, 0.30-0.35 cm wide across sheaths. Leaves linear, bicuspidate, obliquely erect, to 35 mm apart, 56-90 mm long, 3.1-4.0 mm wide, cusps 2-3 mm long; leaf sheaths often not black margined; stipules subulate, acute, 1.5-2.5 mm long. Inflorescence terminal, uniflorous. Pedicellate ovary terete, glabrous, ca. 15 mm long. Flowers white, lip (epichile?) with basal yellow patch. Dorsal sepal oblong-elliptic, subacute, 7 veined, 10.1 mm long, 4.1 mm wide. Lateral sepals obliquely oblong-lanceolate, acute, 5 veined, low carinate in apical third, 12.5 mm long basally (11.1 mm long medially), 4 mm wide. Petals oblong-oblanceolate, subacute, 5 veined, 10.1 mm long, 3.8 mm wide. Labellum trilobed, ca. 11 mm long; hypochile with a medial callosity, sidelobes obtuse, ca. 3 mm long, 2 mm wide laterally, 1.75 mm wide dorsally; ligula subquadrate, widely bidentate, papillose-pubescent on side margins, projecting ca. 0.9 mm past sidelobes; epichile ovate-trullate, apiculate, margin irregular, base with 2 broad thickenings, ca. 8 mm long, 8.5 mm wide. Column semiterete-clavate, 5.1 mm long (4.1 mm long minus anther cap).

Distribution: Papua New Guinea.
Habitat: Forest on a south-facing slope, 1900 m.

Vernacular name: [A kind of] jsp (Kalam Language).

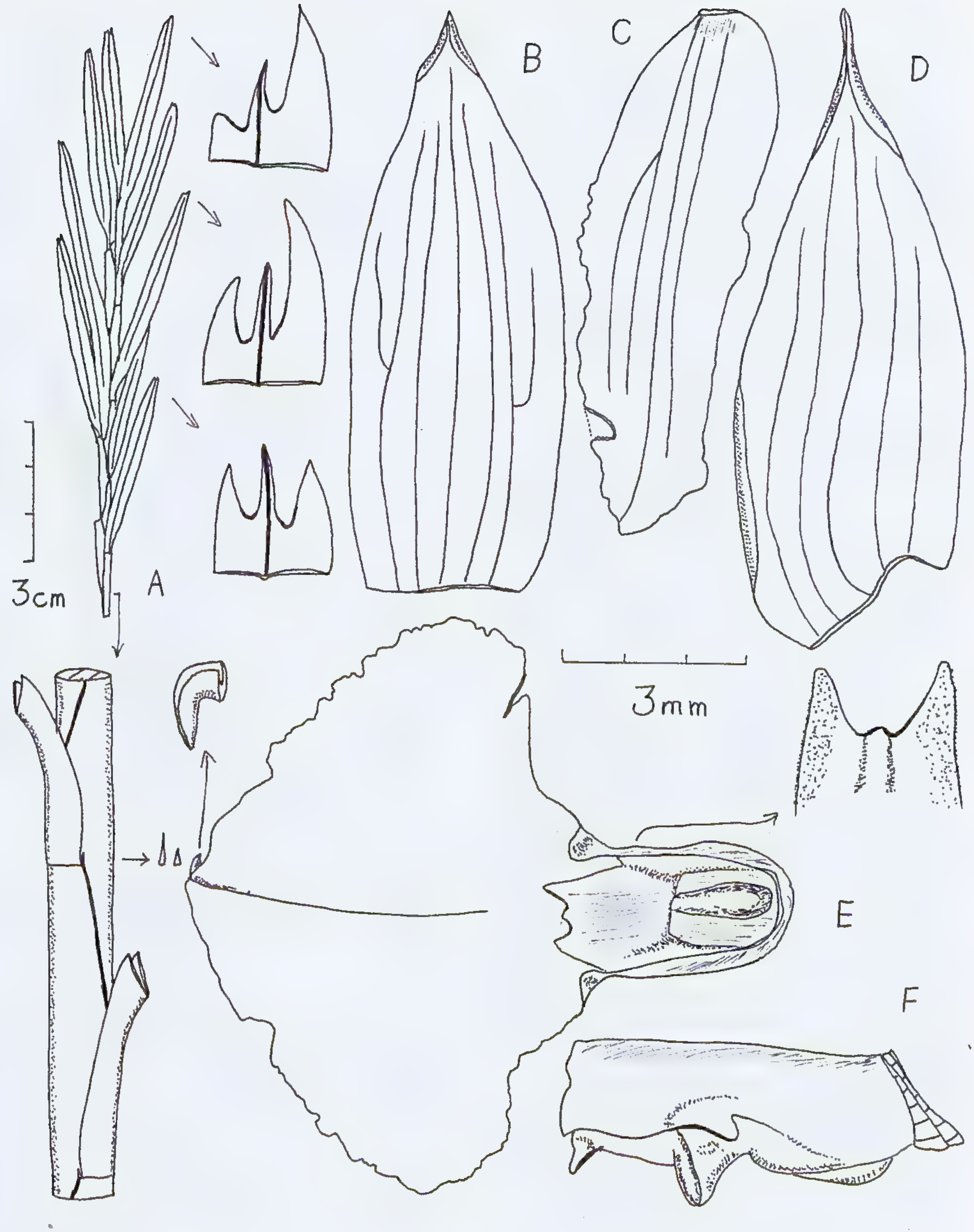
Etymology: Named after the Kaironk Valley, the type locality.

This subspecies of *A. grubbianum* Ormerod differs from the typical entity in having longer (25-34 vs. 17-20 cm), more laxly leaved stems, longer (5.6-9.0 vs. 4.0-5.7 cm) leaves and an ovate-trullate (not rhombic) labellum epichile.

Agrostophyllum huonense Ormerod, *sp. nov.*

Type: Papua New Guinea, Morobe Prov., Huon Peninsula, Cromwell Mts., Mannasat, 2315 m, 19 August 1964, *R.D. Hoogland 9636* (Holotype: L!; Isotypes: A!, CANB, K! x 2, US).

Affinis A. kairoanum Ormerod *sed stipulis foliis brevioribus (0.3-1.0 vs.3-6 mm), ovario longioribus (13 vs. 5 mm), epichilo labello latioribus (8.4 vs. 5.6*



Agrostophyllum huonense – A. stem, upper part; B. dorsal sepal; C. petal; D. lateral sepal; E. labellum; F. column. A and B-F to respective scales. Drawn from holotype.

mm) et columna longioribus (4.5 vs. 3.5-3.6 mm) differt.

Epiphytic herb. Roots terete, pubescent, to 1.5 mm thick. Stems caespitose, semi-compresses, subdensely foliose, 18-26 cm long, 0.28-0.35 cm wide across sheaths. Leaves ligulate-lanceolate, apex tridentate, obliquely erect, 9-13 mm apart, 27-50 mm long, 2.2-3.3 mm wide; tips 0.1-1.3 mm long; leaf sheaths not, partly or wholly black margined, open down to next articulation, exposed apart 10-18 mm long, 2.0-2.5 mm wide laterally; stipules lanceolate, acute, 0.3-1.0 mm long. Inflorescence terminal, hidden among subterminal leaf sheaths, composed of some sheaths (to 15 mm long) and bracts, 1 flowered (successively?), to 5 mm wide. Pedicellate ovary triquetrous with narrow, low wings, 13 mm long. Flowers white with a pale yellow patch at base of lip (epichile?). Dorsal sepal broadly oblong-lanceolate, acute, apical quarter carinate, 5 veined, 8.5 mm long, 3.5 mm wide. Lateral sepals obliquely ovate-lanceolate, acute, upper half carinate, 5 veined, 9.75 mm long basally (8.9 mm long medially), 3.8 mm wide. Petals oblong-lanceolate, subacute, 3 veined, 7.9 mm long, 2.5 mm wide. Labellum trilobed, 9 mm long (not including 0.6 mm long apiculus); hypochile inside with a clavate callus, base shortly saccate, sidelobes oblique, low- rounded, ca. 3.3 mm long, 1.9 mm wide laterally; epichile widely ovate-reniform, apiculate, weakly trilobulate, ca. 5.7 mm long (minus apiculus), 8.4 mm wide, midlobule 1.3 mm long (minus apiculus), 3.5 mm wide. Column obliquely erect, 4.5 mm long (minus anther cap).

Distribution: Papua New Guinea.

Habitat: On tree fern trunks in tree fern grassland, 2315 m.

Etymology: Named after the Huon Peninsula, the area of origin of the type.

This species is similar to *A. kairoanum* Ormerod but differs from it in having smaller, shorter (0.3-1.0 mm) leaf sheath stipules, a much longer (13 vs. 5 mm) pedicellate ovary, wider (8.4 vs. 6 mm) labellum epichile and a longer (4.5 vs. 3.5-3.6 mm), stouter column.

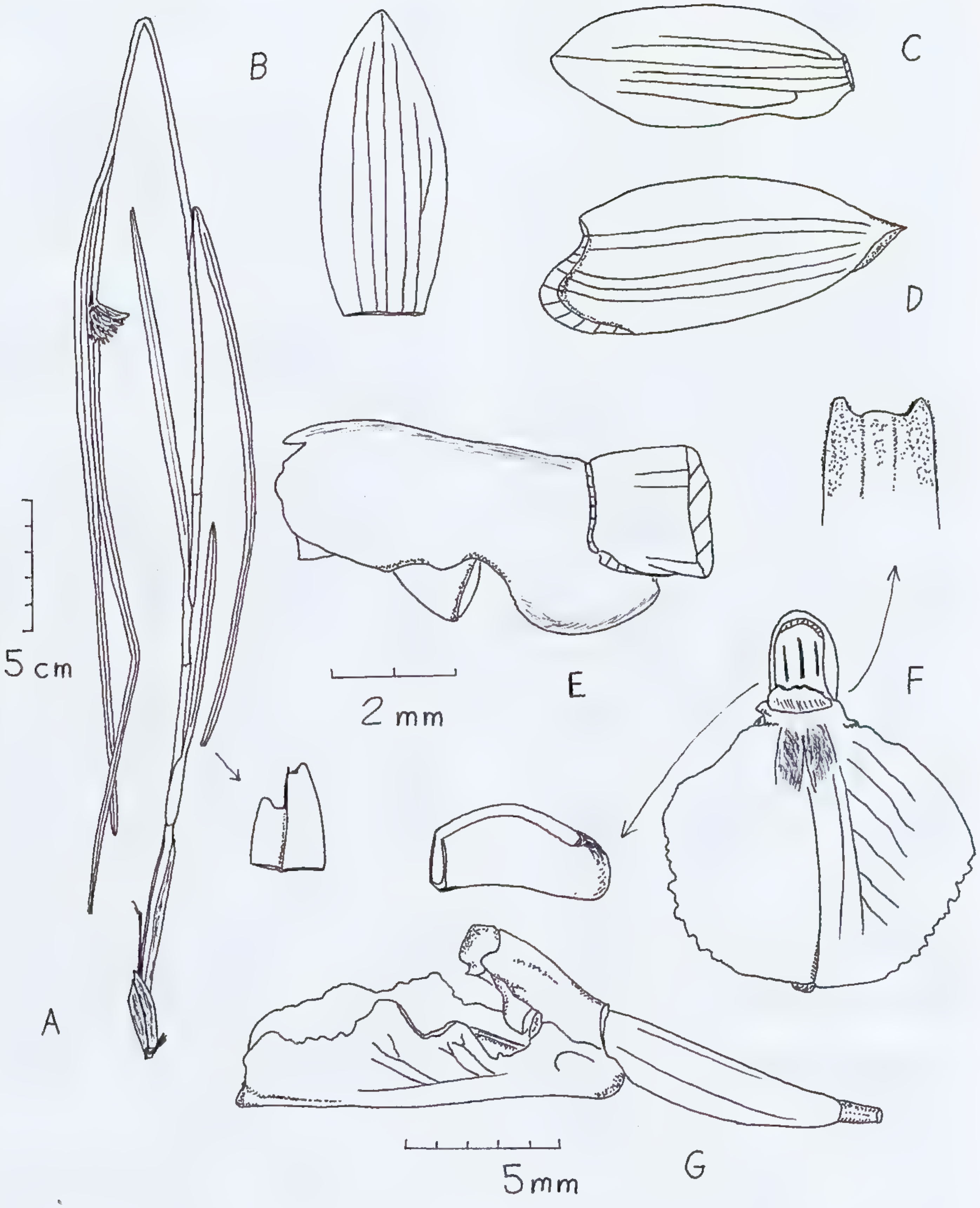
Another similar species is *A. montanum* Schltr. but it apparently has estipulate leaf sheaths, may-flowered (not uniflorous) inflorescences, smaller (sepals to 6.5 mm vs. 8.50-9.75 mm) flowers with more distinct, broadly rounded sidelobes.

Agrostophyllum longinode Ormerod, *sp. nov.*

Type: Papua New Guinea, Eastern Highlands Prov., Chimbu Subdistr., Keglsugl, 2710 m, 3 February 1964, *A.N. Millar NGF 23204* (Holotype: L!; Isotypes: BRI, CANB, LAE).

Affinis A. graminifolium Schltr. *sed vaginis foliis estipulatis (vs. stipulatis) et columna recto (vs. oblique erectis) differt.*

Terrestrial herb. Rhizome not seen. Roots terete, to 2 mm thick. Stems subterete basally, becoming semicomplanate above, laxly 5-6 leaved, straw yellow dry, exposed (i.e. unsheathed) parts 10.0-11.2 cm long, 53-54 cm long, 0.25-0.30 cm thick; basal stem sheaths ca. 7 or more, brown, 1.0-7.5 cm long. Leaves linear to linear-lanceolate, apex inequally bilobed, lobules with 0.5-1.2 mm long irregular to subtruncate tips, gramineous, 10.0-29.5 cm long, 0.45-0.55 cm wide; leaf sheaths black margined, split near the top for 1.0-3.5 cm, 3.5-11.6 cm long, estipulate. Inflorescence terminal, nutant to erect,



Agrostophyllum longinode – A. plant; B. dorsal sepal; C. petal; D. lateral sepal; E. column; F. labellum (hypochile side view and ligula arrowed); G. flower minus tepals. A, BCD-FG and E to respective scales. Drawn from holotype.

composed of numerous bracts, sheaths and some flowers, 2.0-2.5 cm long, ca. 1.5 cm wide; peduncle ca. 1.0-1.2 cm long. Pedicellate ovary subfusiform, triquetrous-ovate in section, with narrow applanate wings on the ribs, ca. 8 mm long. Flowers white. Dorsal sepal oblong-lanceolate, acute, 5 veined, ca. 9.1 mm long, 3.8 mm wide. Lateral sepals obliquely oblong-lanceolate, acute, upper third thickly carinate, 5 veined, 11.3 mm long basally (10 mm long medially), 4.5 mm wide. Petals oblong-elliptic, subacute, 5 veined, 9 mm long, 3.8 mm wide. Labellum trilobed, ca. 11.2 mm long; hypochile shortly saccate, with broadly rounded sidelobes, 2.75-3.00 mm long, ca. 2mm wide laterally; ligula subquadrate-cuneate, widely bidentate, papillose-pubescent, raising 1.3-1.5 mm past sidelobes; epichile suborbicular, front lateral margins dentate, base with 2 low, fleshy pads, ca. 8.2 mm long, 9.5-10.0 mm wide. Column unraised, semiterete, ca. 4.25 mm long (minus anther cap).

Distribution: Papua New Guinea.

Habitat: Grassland near water, 2710 m.

Etymology: From the Latin *longus,* long and *nodus,* knot, in reference to the elongate internodes.

This species appears to be related to *A. graminifolium* Schltr. but it is a more laxly leafy plant with estipulate (vs. stipulate) leaf sheaths, flowers with an entire, suborbicular (vs. trilobulate, trapeziform rarely transversely elliptic) epichile and an unraised (vs. obliquely erect, rarely almost unraised) column.

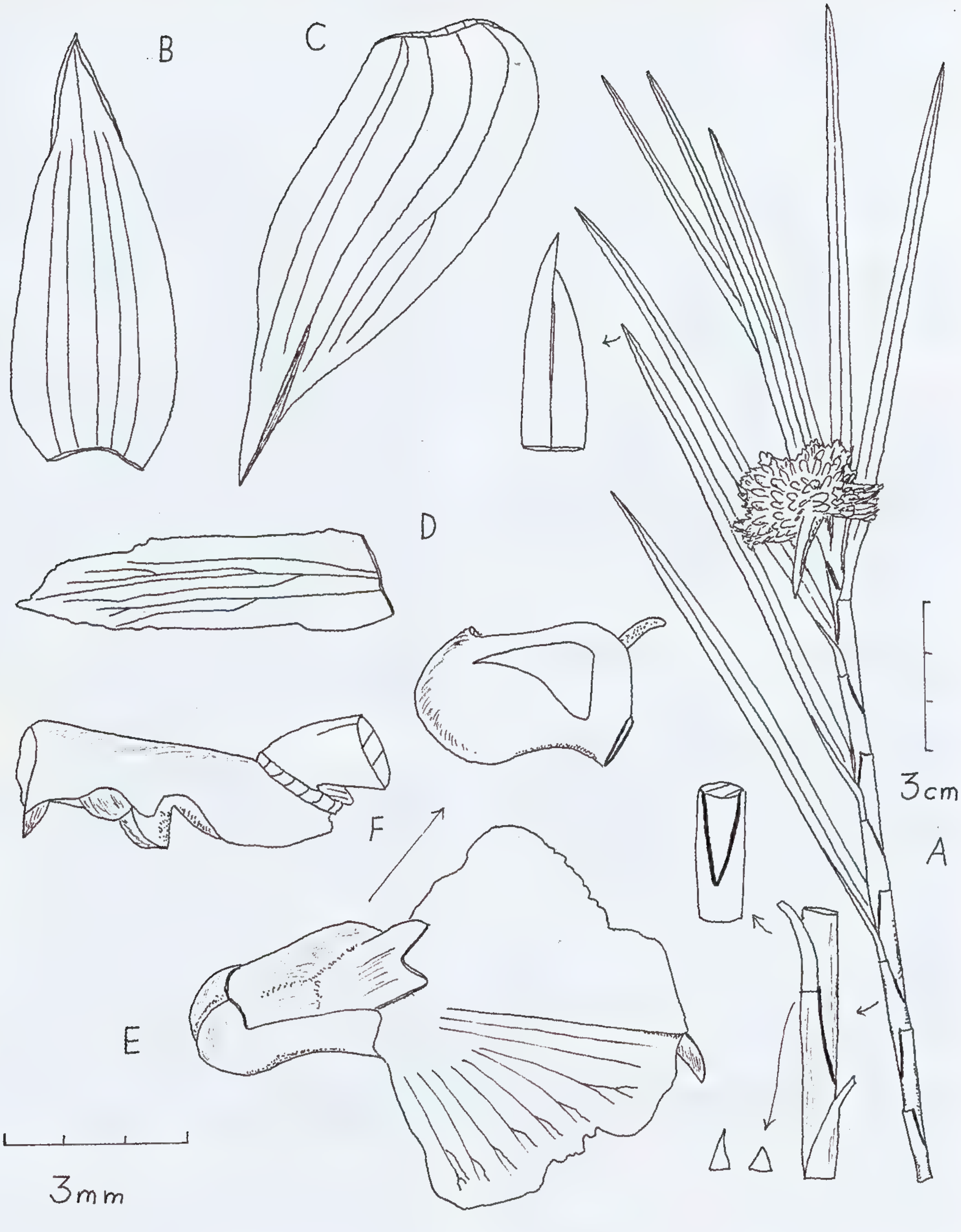
Another collection [Eastern Highlands Prov., Goroka, Fatima River valley, 2375 m, 27 May 1965, *A.N. Millar NGF 22555* (L)] may also be referrable to *A. longinode.* Unfortunately the duplicate seen has no flowers.

Agrostophyllum reeveanum Ormerod, *sp. nov.*

Type: Papua New Guinea, Southern Highlands Prov., Tari District, Komo Subdistr., Tombete, 1800 m, 8 July 1980, *T.M. Reeve 2650* (Holotype: K!; Isotypes: LAE, NSW).

Affinis A. leucocephalum Schltr. *sed vaginis foliis semihiantis (vs. hiantis) et lobulis epichilo transverse oblongis (non late ovatis) differt.*

Epiphytic herb. Roots and rhizome not seen. Stem fragment semiterete-compressed, ca. 16 leaved, covered by leaf sheaths, 19 cm long, 0.25 cm thick basally, 0.4 cm wide across leaf sheaths. Leaves linear-lanceolate, apex equally to inequally bidentate, erect, thin, 10.5-11.4 cm long, 0.40-0.43 cm wide; leaf sheaths black margined, upper half split open, lower half unsplit; stipules deltate to lanceolate, acute, 0.5-0.8 mm long. Inflorescence terminal, a loosely flowered capitulum of several bracts, sheaths and flowers, ca. 30 mm wide. Pedicellate ovary terete, ca. 7.5 mm long. Flowers white, base of lip (epichile?) yellow. Dorsal sepal lanceolate, acute, 5 veined, thinly carinate towards apex, 6.1 mm long, 2.5 mm wide. Lateral sepals obliquely ovate-lanceolate, acute, 5 veined, thinly carinate in apical third, 8 mm long basally (7.5 mm long along midvein), 2.9 mm wide. Petals ligulate-lanceolate, acute, 3 veined, 5.6 mm long, 1.5 mm wide. Labellum trilobed, ca. 7.75 mm long (including 0.75 mm long acumen); hypochile retrorse saccate, sidelobes rounded-truncate, ca. 3 mm long, 2 mm wide laterally, sac 1.1 mm long; ligula subquadrate, bidentate, papillose-pubescent, exceeding sidelobes by ca. 0.8 mm; epichile trilobulate, trapeziform,



Agrostophyllum reeveanum – A. stem, upper part; B. dorsal sepal; C. lateral sepal; D. petal; E. labellum (hypochile side view arrowed); F. column. A and B-F to respective scales. Drawn from holotype.

4.9 mm long (including acumen), 5.5 mm wide, midlobule transversely oblong, ca. 1.3 mm long (minus acumen), 3 mm wide. Column obliquely erect, semiterete, 3.5 mm long (minus anther cap).

Distribution: Papua New Guinea.

Etymology: Named after Tom Reeve, collector of the type and many other Papuan orchid novelties.

This species is florally similar to *A. leucocephalum* Schltr. but differs from it in having half open (vs. fully open) leaf sheaths, a rather loose-flowered (vs. dense) inflorescence and a labellum with a transversely oblong (not widely ovate) midlobule.

Agrostophyllum woitapense Ormerod, *sp. nov.*

Type: Papua New Guinea, Central Prov., Woitape, base of Mt. Alio, N end of the valley, 1900-2100 m, *E.F. de Vogel & A. Vogel in Hort. Leiden 20030236* (Holotype: L!).

Affinis A. papuanum Schltr. *sed foliis angustioribus (1.9-2.1 vs. 2.3-4.0 cm) et epichilo labello late ovatis (non suborbicularis) differt.*

Epiphytic herb. Rhizome and roots not seen. Stem subterete-compressed, 5(-7) leaved in upper half, covered by leaf sheaths, 31.5 cm long, 0.6-0.8 cm thick basally, 1.2-2.3 cm wide across sheaths. Leaves narrowly oblong, apex with a short deltoid mucro, thinly subcoriaceous, 10.1-10.8 cm long, 1.9-2.1 cm wide; leaf sheaths black margined, sometimes not, exposed part 5-8 cm long, 0.6-1.2 cm wide laterally; stipules deltate-subfalcate, subacute, ca. 1 mm long. Inflorescence terminal, subglobose, nutant?, composed of many bracts, sheaths and flowers, ca. 15 mm long, 20 mm wide. Pedicellate ovary clavate, 6.5 mm long. Flowers cream, labellum epichile white. Dorsal sepal ovate-elliptic, subacute, upper third weakly carinate, 3 veined, 4.95 mm long, 2.8 mm wide. Lateral sepals obliquely ovate, subacute, upper third thickly carinate, 3 veined, 5.9 mm long basally (5.1 mm medially), 3.2-3.3 mm wide. Petals obliquely oblong-lanceolate, obtuse, 3 veined, 4.6-4.8 mm long, 2.1-2.2 mm wide. Labellum trilobed, 6.8 mm long; hypochile retrorse saccate-spurred, sidelobes obtuse, 3.3 mm long, 1 mm wide laterally, 1.8 mm wide dorsally; ligula subquadrate, widely obtusely bilobed, retuse-emarginate, papillose-pubescent, surpassing sidelobes by 0.8 mm; epichile widely ovate, subacute, upper margins crenulate, 3.5 mm long, 5.2 mm wide. Column stout, 3 mm long (minus anther cap).

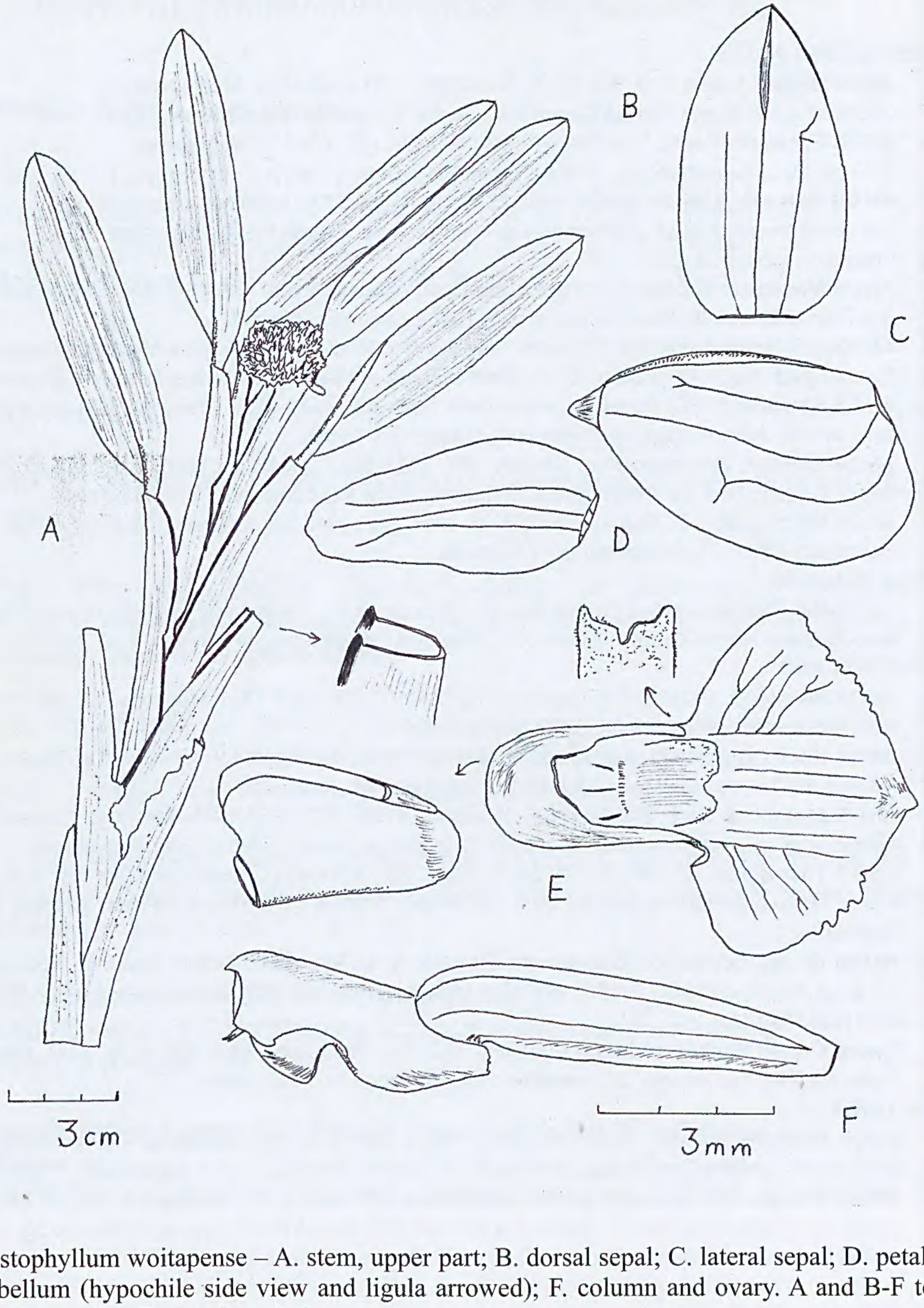
Distribution: Papua New Guinea.
Habitat: Montane river valley forest ca. 30 m high, in places with gregarious emergent *Pandanus*, 1900-2100 m.

Etymology: Named after Woitape, near the type locality.
This species is related to *A. papuanum* Schltr. but it has narrower (1.9-2.1 vs. 2.3-4.0 cm) leaves, more attenuate leaf sheaths and a widely ovate (vs. suborbicular) labellum epichile.

Acknowledgements.
I wish to thank herbarium and library at the Harvard University Herbaria (A, AMES, GH) for their help and hospitality during my visits. BM, K and L kindly loaned specimens for study.

Literature Cited.

Ormerod, P. 2011. New Species of Papuan *Agrostophyllum* 1. Orchadian 16, 12: 563-573.



Agrostophyllum woitapense – A. stem, upper part; B. dorsal sepal; C. lateral sepal; D. petal; E. labellum (hypochile side view and ligula arrowed); F. column and ovary. A and B-F to respective scales. Drawn from holotype.

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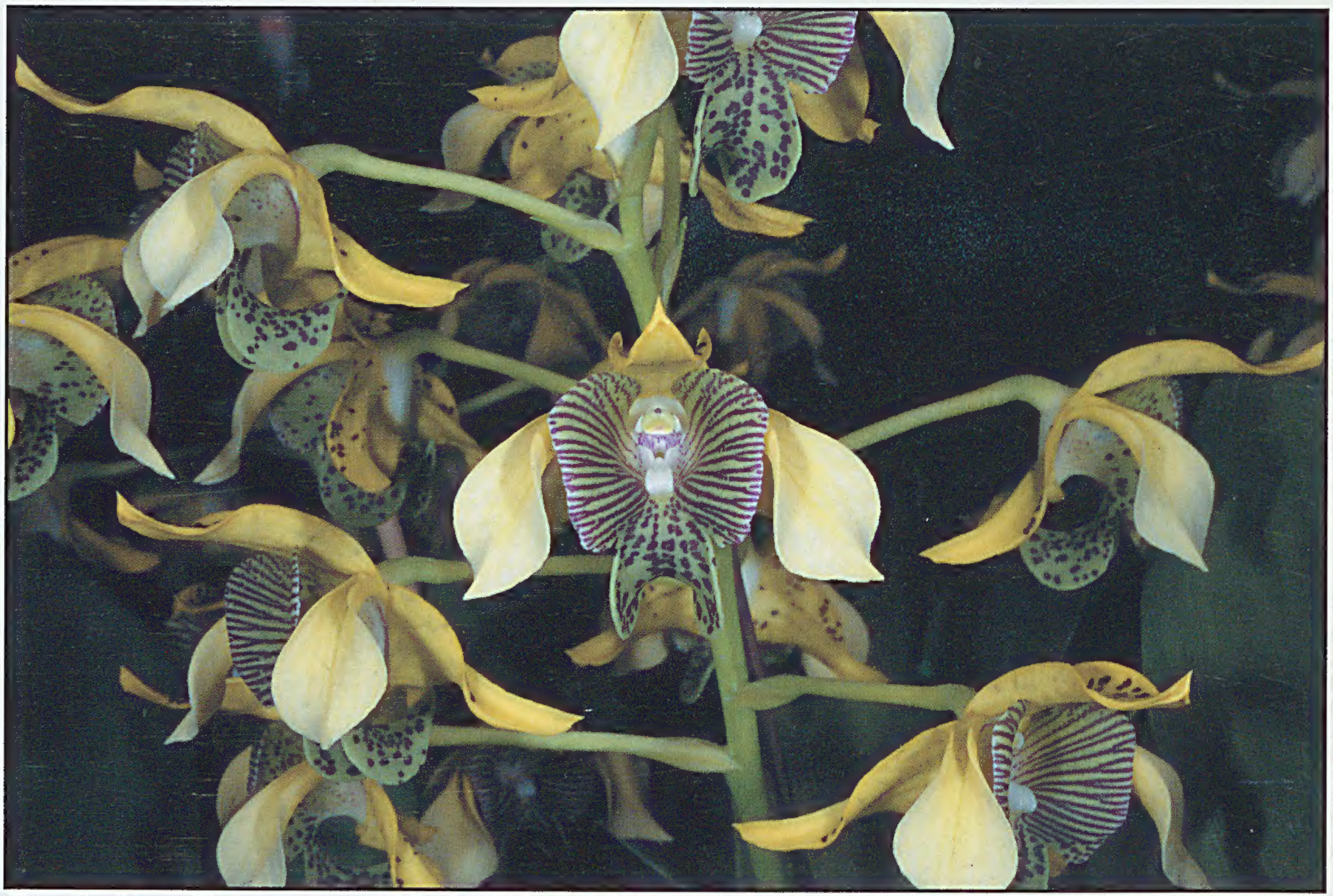
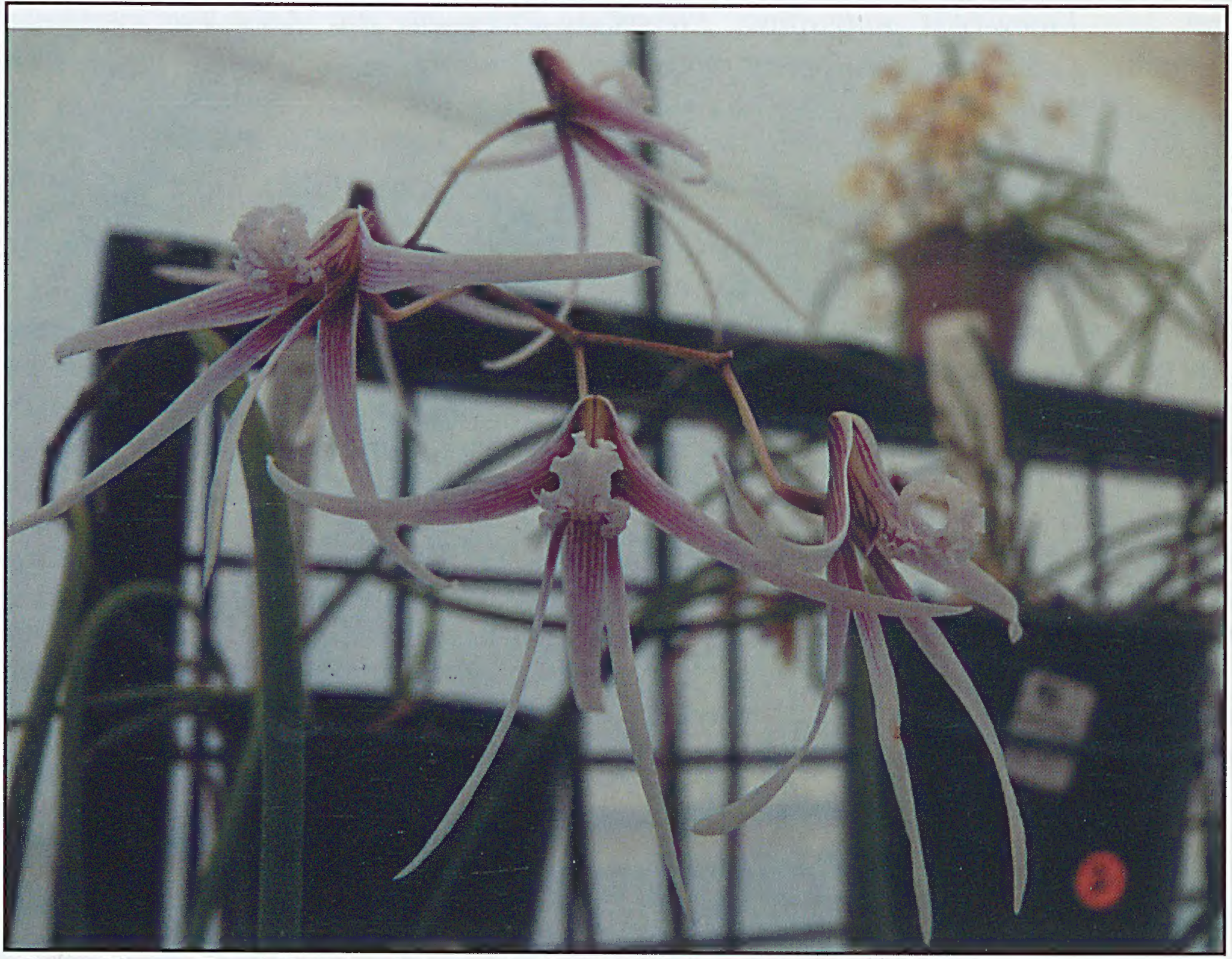


Dendrobium Engagement 'Margaret' AM/ACC-ANOS HCC/ACM AOC/NSW
Champion Hybrid at the Speciosum Show at Kempsey Photo Bill Dobson



D. Grey Ghost 'Tumbi' X *D. dolichophylla* 'Tumbi' (section *Rhizobium*)